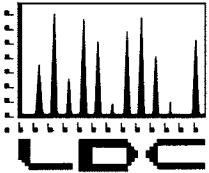




APPENDIX C

DATA VALIDATION SUMMARY REPORT (DVSR) NO. 17



LABORATORY DATA CONSULTANTS, INC.

7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

Hargis & Associates
1640 South Stapley Drive, Suite 124
Mesa, AZ 85204
ATTN: Ms. Barbara Murphy

LDC #18945
July 16, 2008

SUBJECT: Data Validation Summary Report #17 Dense Non-Aqueous Phase Liquid(DNAPL) Step-Out Boring/Groundwater Investigation Spring 2008, Henderson, NV

Dear Ms. Murphy,

Enclosed is the Data Validation Summary Report #17 Dense Non-Aqueous Phase Liquid(DNAPL) Step-Out Boring/Groundwater Investigation Spring 2008, for the Henderson, NV project.

We appreciate this opportunity to support Hargis & Associates in the performance of this project. Please feel free to call me at (760) 634-0437 if you have any questions.

Please feel free to contact us if you have any questions.

Sincerely,

Stella Cuenco
Stella S. Cuenco
Project Manager/Senior Chemist

**Data Validation Summary Report #17
Dense Non-Aqueous Phase Liquid (DNAPL)
Step-Out Boring/Groundwater Investigation
Spring 2008
Henderson, Nevada**

Prepared for

**Nevada Division of Environmental Protection
1771 E. Flamingo Road, Suite 121-A
Las Vegas, Nevada 89119-0837**

Prepared by

**Laboratory Data Consultants
7750 El Camino Real, Suite 2C
Carlsbad, California 92009**

July 16, 2008

Table of Contents

<u>Section</u>	<u>Title</u>	<u>Page No.</u>
1.0	INTRODUCTION.....	1
2.0	VOLATILE ORGANIC COMPOUNDS.....	6
	2.1 Precision and Accuracy	6
	2.2 Representativeness	7
	2.3 Comparability.....	8
	2.4 Completeness.....	8
3.0	SEMITVOLATILE ORGANIC COMPOUNDS	8
	3.1 Precision and Accuracy	8
	3.2 Representativeness	9
	3.3 Comparability.....	10
	3.4 Completeness.....	10
4.0	CHLORINATED PESTICIDES	10
	4.1 Precision and Accuracy	10
	4.2 Representativeness	11
	4.3 Comparability.....	11
	4.4 Completeness.....	12
5.0	ORGANIC ACIDS.....	12
	5.1 Precision and Accuracy	12
	5.2 Representativeness	12
	5.3 Comparability.....	13
	5.4 Completeness.....	13
6.0	SPECIFIC GRAVITY	13
	6.1 Precision and Accuracy	13
	6.2 Representativeness	13
	6.3 Comparability.....	14
	6.4 Completeness.....	14
7.0	VARIANCES IN ANALYTICAL PERFORMANCE.....	14

8.0	SUMMARY OF PARCC CRITERIA.....	14
8.1	Precision and Accuracy	14
8.2	Representativeness	14
8.3	Comparability	14
8.4	Completeness.....	15
9.0	CONCLUSIONS AND RECOMMENDATIONS.....	16
10.0	REFERENCES.....	17

LIST OF TABLES

- TABLE IA – Soil Sample Cross-Reference
- TABLE IB – Water Sample Cross-Reference
- TABLE II – Reason Codes and Definitions
- TABLE IIIA – Overall Qualified Soil Results
- TABLE IIIB – Overall Qualified Water Results

ATTACHMENT

- ATTACHMENT A – VOC Soil Data Validation Report
- ATTACHMENT B – VOC Water Data Validation Report
- ATTACHMENT C – SVOC Soil Data Validation Report
- ATTACHMENT D – SVOC Water Data Validation Report
- ATTACHMENT E – Pesticides Soil Data Validation Report
- ATTACHMENT F – Pesticides Water Data Validation Report
- ATTACHMENT G – Organic Acids Data Validation Report
- ATTACHMENT H – Specific Gravity Data Validation Report

LIST OF ACRONYMS AND ABBREVIATIONS

DNAPL	Dense Non-Aqueous Phase Liquid
DQO	Data Quality Objectives
DVSR	Data Validation Summary Report
LCS/LCSD	Laboratory Control Sample / Laboratory Control Sample Duplicate
MS/MSD	Matrix Spike / Matrix Spike Duplicate
NDEP	Nevada Division of Environmental Protection
PARCC	Precision, Accuracy, Representativeness, Comparability, Completeness
QA/QC	Quality Assurance / Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference
RRF	Relative Response Factor
SDG	Sample Delivery Group
SVOC	Semivolatile Organic Compound
ug/kg	Micrograms per Kilogram
ug/l	Micrograms per Liter
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound
%D	Percent Difference
%R	Percent Recovery
%RSD	Percent Relative Standard Deviation

1.0 INTRODUCTION

This data validation summary report (DVSER) has been prepared by Laboratory Data Consultants, Inc. (LDC) to assess the validity and usability of laboratory analytical data from the Dense Non-Aqueous Phase Liquid (DNAPL) step-out boring and groundwater investigation conducted at the Montrose Chemical Corporation of California site (Montrose Site) in Henderson, Nevada. The investigation was performed by Hargis + Associates, Inc. as part of the *Supplemental Soil Investigation Work Plan* (August 30, 2006) and the *Supplemental Groundwater Investigation Work Plan* (August 31, 2006) and included the collection and analyses of 58 environmental and quality control (QC) samples. The analyses were performed by the following methods:

Volatile Organic Compounds (VOCs) by EPA SW 846 Method 8260B
Semivolatile Organic Compounds (SVOCs) by EPA SW 846 Method 8270C
Chlorinated Pesticides by EPA SW 846 Method 8081A
Organic Acids by HPLC Method
Specific Gravity by Standard Method 2710-F

Analytical services were provided by Test America, Inc. The samples were grouped into sample delivery groups (SDGs) of up to 20 field samples received by each laboratory. The samples are associated with QA/QC samples designed to document the data quality of the entire SDG or a sub-group of samples within an SDG. Tables IA and IB are cross-reference tables listing each sample, analysis, SDG, collection date, laboratory sample number, and matrix. All shaded samples in Table I were reviewed under EPA Level IV guidelines.

Approximately twenty percent of the analytical data for the environmental samples were validated according to EPA Level IV data validation procedures and the rest of the analytical data were validated according to EPA Level III data validation procedures. The analytical data were evaluated for quality assurance and quality control (QA/QC) based on the following documents: *Quality Assurance Project Plan Site-wide Soil and Groundwater Investigations Former Montrose and Stauffer Sites, Henderson, Nevada* (QAPP), Revision 1.0, October 26, 2006, *Contract Laboratory Program National Functional Guidelines for Organic Data Review*, October 1999, *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004, and the *EPA SW 846 Third Edition, Test Methods for Evaluating Solid Waste*, update I, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IV, February 2007.

This report summarizes the QA/QC evaluation of the data according to precision, accuracy, representativeness, completeness, and comparability (PARCC) relative to the project data quality objectives (DQOs). This report provides a quantitative and qualitative assessment of the data and identifies potential sources of error, uncertainty, and bias that may affect the overall usability.

The PARCC summary report evaluates and summarizes the results of QA/QC data validation for the entire sampling program. Each analytical fraction has a separate section for each of the PARCC criteria. These sections interpret specific QC deviations and their effects on both individual data points and the analyses as a whole. Section 8.0 presents a summary of the PARCC criteria by comparing quantitative parameters with acceptability criteria defined in the project DQO's. Qualitative PARCC criteria are also summarized in this section.

Precision and Accuracy of Environmental Data

Environmental data quality depends on sample collection procedures, analytical methods and instrumentation, documentation, and sample matrix properties. Both sampling procedures and laboratory analyses contain potential sources of uncertainty, error, and/or bias, which affect the overall quality of a measurement. Errors for sample data may result from incomplete equipment decontamination, inappropriate sampling techniques, sample heterogeneity, improper filtering, and improper preservation. The accuracy of analytical results is dependent on selecting appropriate analytical methods, maintaining equipment properly, and complying with QC requirements. The sample matrix also is an important factor in the ability to obtain precise and accurate results within a given media.

Environmental and laboratory QA/QC samples assess the effects of sampling procedures and evaluate laboratory contamination, laboratory performance, and matrix effects. QA/QC samples include: trip blanks, rinsate blanks, field duplicates, method blanks, laboratory control samples and laboratory control sample duplicates (LCS/LCSDs), surrogate spikes, and matrix spike/matrix spike duplicates (MS/MSDs).

Before conducting the PARCC evaluation, the analytical data were validated according to the QAPP (October 2006), Functional Guidelines (USEPA 1999, 2004), and EPA SW 846 Test Methods. Samples not meeting the acceptance criteria were qualified with a flag, an abbreviation indicating a deficiency with the data. The following are flags used in data validation.

- J- Estimated The associated numerical value is an estimated quantity with a negative bias. The analyte was detected but the reported value may not be accurate or precise.
- J+ Estimated The associated numerical value is an estimated quantity with a positive bias. The analyte was detected but the reported value may not be accurate or precise.
- J Estimated The associated numerical value is an estimated quantity. It is not possible to assess the direction of the potential bias. The analyte was detected but the reported value may not be accurate or precise. The "J" qualification indicates the data fell outside the QC limits, but the exceedance was not sufficient to cause rejection of the data.
- R Rejected The data is unusable (the compound or analyte may or may not be present). Use of the "R" qualifier indicates a significant variance from functional guideline acceptance criteria. Either resampling or reanalysis is necessary to determine the presence or absence of the rejected analyte.
- U Nondetected Analyses were performed for the compound or analyte, but it was not detected. The "U" designation is also applied to suspected blank contamination. The "U" flag is used to qualify any result detected in an environmental sample at a concentration less than 10 times the value of the concentration in any associated blank for common laboratory contaminants and less than 5 times the concentration in any associated blank for all other contaminants.
- UJ Estimated/Nondetected Analyses were performed for the compound or analyte, but it was not detected and the sample quantitation or detection limit is an estimated quantity due to poor accuracy or precision. This qualification is also used to flag possible false negative results in the case where low bias in the analytical system is indicated by low calibration response, surrogate, or other spike recovery.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

The hierarchy of flags is listed below:

R > J	The R flag will always take precedence over the J qualifier.
J > J+ or J-	A non-biased (J) flag will always supersede biased (J+ or J-) flags since it is not possible to assess the direction of the potential bias.
J = J+ plus J-	Adding biased flags with opposite signs will result in a non-biased flag.
UJ = U (and modified concentration) plus J or J+ or J-	The UJ flag is used when a non-detected (U) flag is added to a biased or non-biased flag.

Table II lists the reason codes used. Reason codes explain why flags have been applied and identify possible limitations of data use. Reason codes are cumulative except when one of the flags is R then only the reason code associated to the R flag will be used.

Tables IIIA and IIB present the overall qualified results after all the flags or validation qualifiers and associated reason codes have been applied.

Once the data are reviewed and qualified according to the QAPP, functional guidelines and EPA SW 846 Test Methods, the data set is then evaluated using PARCC criteria. PARCC criteria provide an evaluation of overall data usability. The following is a discussion of PARCC criteria as related to the project DQOs.

Precision is a measure of the agreement or reproducibility of analytical results under a given set of conditions. It is a quantity that cannot be measured directly but is calculated from percent recovery data. Precision is expressed as the relative percent difference (RPD):

$$RPD = (D1-D2)/\{1/2(D1+D2)\} \times 100$$

where:

D1 = reported concentration for the sample

D2 = reported concentration for the duplicate

Precision is primarily assessed by calculating an RPD from the percent recoveries of the spiked compounds for each sample in the MS/MSD pair. In the absence of an MS/MSD pair, a laboratory duplicate or LCS/LCSD pair can be analyzed as an alternative means of assessing precision. An additional measure of sampling precision was obtained by collecting and analyzing field duplicate samples, which were compared using the RPD result as the evaluation criteria.

MS and MSD samples are field samples spiked by the laboratory with target analytes prior to preparation and analysis. These samples measure the overall efficiency of the analytical method in recovering target analytes from an environmental matrix. A LCS is similar to an MS/MSD sample in that the LCS is spiked with the same target analytes prior to preparation and analysis. However, the LCS is prepared using a controlled interference-free matrix instead of a field sample aliquot. Laboratory reagent water is used to prepare aqueous LCS. Non-aqueous LCSs are prepared using solid media approved by the American Society for Testing and Materials (ASTM) for their homogeneity. The LCS measures laboratory efficiency in recovering target analytes from either a solid or aqueous matrix in the absence of matrix interferences.

For inorganics analysis, one primary sample is analyzed and accompanied by an unspiked laboratory duplicate. The data reviewer compares the reported results of the primary analysis and the laboratory duplicate, then calculates RPDs, which are used to assess laboratory precision.

Laboratory and field sampling precision are further evaluated by calculating RPDs for field sample duplicate pairs. The sampler collects two field samples at the same location and under identically controlled conditions. The laboratory then analyzes the samples under identical conditions.

An RPD outside the numerical QC limit in either MS/MSD samples or LCS/LCSD indicates imprecision. Imprecision is the variance in the consistency with which the laboratory arrives at a particular reported result. Thus, the actual analyte concentration may be higher or lower than the reported result.

Possible causes of poor precision include sample matrix interference, improper sample collection or handling, inconsistent sample preparation, and poor instrument stability. In some duplicate pairs, results maybe reported in either the primary or duplicate samples at levels below the reporting limit or non-detected. Since these values are considered to be estimates, RPD exceedances from these duplicate pairs do not suggest a significant impact on the data quality.

Accuracy is a measure of the agreement of an experimental determination and the true value of the parameter being measured. It is used to identify bias in a given measurement system. Recoveries outside acceptable QC limits may be caused by factors such as instrumentation, analyst error, or matrix interference. Accuracy is assessed through the analysis of MS, MSD, LCS, and samples containing surrogate spikes. In some cases, samples from multiple SDGs were within one QC batch and therefore are associated with the same laboratory QC samples. Surrogate spikes are either isotopically labeled compounds or compounds that are not typically detected in the samples. Surrogate spikes are added to every blank, environmental sample, LCS, MS/MSD, and standard, for all applicable organic analyses. Accuracy of inorganic analyses is determined using the percent recoveries of MS and LCS analyses.

Percent recovery (%R) is calculated using the following equation:

$$\%R = (A-B)/C \times 100$$

where:

A = measured concentration in the spiked sample

B = measured concentration of the spike compound in the unspiked sample

C = concentration of the spike

The percent recovery of each analyte spiked in MS/MSD samples, LCS, and surrogate compounds added to environmental samples is evaluated with the acceptance criteria specified by the previously noted documents. Spike recoveries outside the acceptable QC accuracy limits provide an indication of bias, where the reported data may overestimate or underestimate the actual concentration of compounds detected or quantitation limits reported for environmental samples.

Representativeness is a qualitative parameter that expresses the degree to which the sample data are characteristic of a population. It is evaluated by reviewing the QC results of blanks, samples and holding times. Positive detects of compounds in the blank samples identify compounds that may have been introduced into the samples during sample collection, transport, preparation, or analysis. The QA/QC blanks collected and analyzed are method blanks, trip blanks, and field blanks.

A method blank is a laboratory grade water or solid matrix that contains the method reagents and has undergone the same preparation and analysis as the environmental samples. The method blank provides a measure of the combined contamination derived from the laboratory source water, glassware, instruments, reagents, and sample preparation steps. Method blanks are prepared for each sample of a similar matrix extracted by the same method at a similar concentration level.

Trip blanks are used to identify possible volatile organic contamination introduced into the sample during transport. A trip blank is a sample bottle filled in the laboratory with reagent-grade water and preserved to a pH less than 2 with hydrochloric acid. It is transported to the site, stored with the sample containers, and returned unopened to the laboratory for analysis.

Additionally, for inorganic analyses, initial and continuing calibration blanks consist of acidified laboratory grade water, which are injected at the beginning and at a regular frequency during each 12 - hour sample analysis run. These blanks estimate residual contaminants from the previous sample or standards analysis and measure baseline shifts that commonly occur in emission and absorption spectroscopy.

Field blanks consist of analyte-free source water stored at the sample collection site. The field blank is collected from each source water used during each sampling event. Field blanks were collected and analyzed for all target analytes.

Contaminants found in both the environmental sample and a blank sample are assumed to be laboratory artifacts if the concentration in the environmental sample is less than 10 times the blank value for common laboratory contaminants; methylene chloride, acetone, 2-butanone and phthalates or 5 times the blank value for other laboratory contaminants.

Holding times are evaluated to assure that the sample integrity is intact for accurate sample preparation and analysis. Holding times will be specific for each method and matrix analyzed. Holding time exceedances can cause loss of sample constituents due to biodegradation, precipitation, volatilization, and chemical degradation.

Comparability is a qualitative expression of the confidence with which one data set may be compared to another. It provides an assessment of the equivalence of the analytical results to data obtained from other analyses. It is important that data sets be comparable if they are used in conjunction with other data sets. The factors affecting comparability include the following: sample collection and handling techniques, matrix type, and analytical method. If these aspects of sampling and analysis are carried out according to standard analytical procedures, the data are considered comparable. Comparability is also dependent upon other PARCC criteria, because only when precision, accuracy, and representativeness are known can data sets be compared with confidence.

Completeness is defined as the percentage of acceptable sample results compared to the total number of sample results. Completeness is evaluated to determine if an acceptable amount of usable data were obtained so that a valid scientific site assessment can be completed. Completeness equals the total number of sample results for each fraction minus the total number of rejected sample results divided by the total number of sample results multiplied by 100. As specified in the project DQOs, the goal for completeness for target analytes in each analytical fraction is 90 percent.

Percent completeness is calculated using the following equation:

$$\%C = (T - R)/T \times 100$$

where:

%C = percent completeness

T = total number of sample results

R = total number of rejected sample results

Completeness is also determined by comparing the planned number of samples per method and matrix as specified in the QAPP, with the number determined above.

The following sections present a review of QC data for each analytical method.

2.0 VOLATILE ORGANIC COMPOUNDS

A total of 50 soil and 8 water samples were analyzed for VOCs by EPA SW 846 Method 8260B. All VOC data were assessed to be valid since none of the 3680 total results were rejected based on holding time or QC exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCC criteria and evaluated based on the DQOs.

2.1 Precision and Accuracy

2.1.1 Instrument Calibration

Initial and continuing calibration results provide a means of evaluating accuracy within a particular SDG. Relative response factor (RRF), percent relative standard deviation (%RSD), and percent difference (%D) are the three major parameters used to measure the effectiveness of instrument calibration. RRF is a measure of the relative spectral response of an analyte compared to its internal standard. %RSD is an indication of deviation of individual calibration standards compared to the average response of the initial multi-point instrument calibration. %D is a comparison of a continuing calibration instrumental response with its initial response. %RSD and %D exceedances suggest routine instrumental anomalies, which typically impact all sample results for the affected compounds.

The %RSDs met the acceptance criteria of 30 percent or the coefficient of determination (r^2) were greater than 0.990 in the initial calibration. The %Ds in the initial calibration verification met the acceptance criteria of 25 percent.

Eighty-one soil results were qualified as detected estimated (J) or non-detected estimated (UJ). The %Ds in the continuing calibrations were outside the acceptance criteria of 25 percent and/or the RRFs were outside the acceptance criteria of ≤ 0.05 in the initial and continuing calibrations. The affected analytes were 1,2-dibromo-3-chloropropane, 2-butanone, 2-hexanone, 4-methyl-2-pentanone, acetone, chloromethane, and dichlorodifluoromethane. The details regarding the qualification of results are presented in Attachment A, Sections III & IV of the data validation report.

2.1.2 Surrogates

Due to surrogate %Rs outside acceptance criteria, 260 results for soil samples RB-10-30, RB-10-40, RB-10-90, RB-10-100, RB-10-110, and RB-15-110 were qualified as detected estimated (J,J+) or non-detected estimated (UJ). The details regarding the qualification of results are presented in Attachment A, Section VI.

2.1.3 MS/MSD Samples

No data were qualified due to a high %R in the water MSD. The associated sample result was non-detected. The MS/MSD non-conformance is presented in Attachment B, Section VII.

MS/MSDs were not performed for the soil samples due to insufficient sample availability. Since the LCS/LCSD %Rs and RPDs met the acceptance criteria with the exceptions noted below, the absence of MS/MSD samples was judged to have no impact on the data quality and no qualifications were made.

2.1.4 LCS Samples

Due to LCS/LCSD %Rs and RPDs outside acceptance criteria, 71 results for several soil samples were qualified as detected estimated (J) or non-detected estimated (UJ). The details regarding the qualification of results are presented in Attachment A, Section VIII.

2.1.5 Internal Standards

Due to internal standard %Rs outside acceptance criteria, 192 results for soil samples RB-10-30, RB-10-100, RB-10-90, RB-10-110, RB-10-120, and RB-15-110 were qualified as detected estimated (J) or non-detected estimated (UJ). The details regarding the qualification of results are presented in Attachment A, Section X.

2.1.6 Field Duplicate Samples

The field duplicate samples were evaluated for acceptable precision with RPDs for the compounds. Sample data were not qualified on the basis of field duplicate precision. The field duplicate results are presented in Attachment B, Section XVI.

2.1.7 Compound Quantitation and Target Identification

All compound quantitation and target identification were found to be acceptable.

2.2 Representativeness

2.2.1 Holding Times

The evaluation of holding times to verify compliance with the method was conducted. All holding times were met.

Due to sample condition non-conformances (i.e. headspace in sample containers), 60 results for water sample TB-050808 were qualified as non-detected estimated (UJ). The details regarding the qualification of results are presented in Attachment B, Section I.

2.2.2 Blanks

Method blanks, equipment blanks, field blanks and trip blanks were collected and analyzed to evaluate representativeness. The concentration for an individual target compound in any of the four types of QA/QC blanks was used for data qualification.

If contaminants were detected in a blank, corrective actions were made for the chemical analytical data during data validation. The corrective action consisted of amending the laboratory reported results based on the following criteria.

Results Below the RL If a sample result for the blank contaminant was less than the RL and less than 10 times the blank value for common contaminants or 5 times the blank value for other contaminants, the sample result was amended as non-detected at the RL for the target compound.

Results Above the RL If a sample result for the blank contaminant was greater than the sample RL and less than 10 times the blank value for common contaminants or 5 times the blank value for other contaminants, the sample result for the blank contaminant was amended as non-detected at the concentration reported in the sample results.

No Action If a sample result for the blank contaminant was greater than 10 times the blank value for common contaminants or 5 times the blank value for other contaminants, the result was not amended.

2.2.2.1 Method Blanks

Due to method blank contamination, 11 acetone results were qualified as not detected (U). The details regarding the qualification of results are presented in Attachment A, Section V.

2.2.2.2 Equipment and Field Blanks

No data were qualified due to the contaminants detected in one of the equipment blanks for this analysis.

2.2.2.3 Trip Blanks

No contaminants were detected in the trip blank for this analysis.

2.3 Comparability

The laboratory used standard analytical methods for all of the analyses. In all cases, the method detection limits attained were at or below the reporting limit. Target compounds detected below the reporting limits flagged (J) by the laboratory should be considered estimated. The comparability of the data is regarded as acceptable.

2.4 Completeness

The completeness level attained for VOC field samples was 100 percent. This percentage was calculated as the total number of accepted sample results divided by the total number of sample results multiplied by 100.

3.0 SEMIVOLATILE ORGANIC COMPOUNDS

A total of 50 soil and 4 water samples were analyzed for SVOCs by EPA SW 846 Method 8270C. All SVOC data were assessed to be valid since none of the 4522 total results were rejected based on holding time or QC exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCC criteria and evaluated based on the DQOs.

3.1 Precision and Accuracy

3.1.1 Instrument Calibration

As previously discussed in Section 2.1.1, initial and continuing calibration results provide a means of evaluating accuracy.

The RRFs met the acceptance criteria of 0.05 in the initial calibration and continuing calibration. The %RSDs met the acceptance criteria of 30 percent or the coefficient of determination (r^2) were greater than 0.990 in the initial calibration. No data were qualified due to high %Ds in the initial calibration verification. The associated sample results were non-detected.

Thirty one 2,4-dinitrophenol, 2,4-dinitrotoluene, 4-nitroaniline, and n-hydroxymethylphthalimide results were qualified as non-detected estimated (UJ). The %Ds in the continuing calibration were outside the acceptance criteria of 25 percent. The details regarding the qualification of results are presented in Attachments C & D, Section IV.

3.1.2 Surrogates

All surrogate %Rs met the acceptance criteria.

3.1.3 MS/MSD Samples

Due to MS/MSD %Rs and RPDs outside acceptance criteria, eight results for soil samples RB-11-20, RB-11-100, and RB-15-10 were qualified as non-detected estimated (UJ). The details regarding the qualification of results are presented in Attachment C, Section VII.

MS/MSDs were not performed for the water samples due to insufficient sample availability. Since the LCS/LCSD %Rs and RPDs met the acceptance criteria with the exceptions noted below, the absence of MS/MSD samples was judged to have no impact on the data quality and no qualifications were made.

3.1.4 LCS Samples

No data were qualified due to a high %R in the soil LCS. The associated sample results were non-detected. The LCS non-conformance is presented in Attachment C, Section VIII.

Due to an LCS/LCSD RPD outside acceptance criteria, the benzoic acid results for water samples MC-MW-15-0508, PL-502-0508, MC-MW-17-0508, and MC-MW-18-0508 were qualified as detected estimated (J) or non-detected estimated (UJ). The details regarding the qualification of results are presented in Attachment D, Section VIII.

3.1.5 Internal Standards

Due to low internal standard areas, 14 results for soil sample RB-11-130 were qualified as detected non-detected estimated (UJ). The details regarding the qualification of results are presented in Attachment C, Section X.

3.1.6 Field Duplicate Samples

The field duplicate samples were evaluated for acceptable precision with RPDs for the compounds. Sample data were not qualified on the basis of field duplicate precision. The field duplicates are presented in Attachment D, Section XVI.

3.1.7 Compound Quantitation and Target Identification

All compound quantitation and target identification were found to be acceptable.

3.2 Representativeness

3.2.1 Holding Times

The evaluation of holding times to verify compliance with the method was conducted. The holding times were met for all soil samples.

Due to technical holding time exceedances, 272 results for water samples MC-MW-15-0508, PL-502-0508, MC-MW-17-0508, and MC-MW-18-0508 were qualified as detected estimated (J-) or non-detected estimated (UJ). The extraction holding time criteria are 7 days for water samples. The details regarding the qualification of results are presented in Attachment D, Section I.

3.2.2 Blanks

As previously discussed in Section 2.2.2, method blanks were analyzed to evaluate representativeness.

3.2.2.1 Method Blanks

No contaminants were detected in the method blanks for this analysis.

3.3 Comparability

The laboratory used standard analytical methods for all of the analyses. In all cases, the method detection limits attained were at or below the reporting limit. Target compounds detected below the reporting limits flagged (J) by the laboratory should be considered estimated. The comparability of the data is regarded as acceptable.

3.4 Completeness

The completeness level attained for SVOC field samples was 100 percent. This percentage was calculated as the total number of accepted sample results divided by the total number of sample results multiplied by 100.

4.0 CHLORINATED PESTICIDES

A total of 50 soil and 4 water samples were analyzed for pesticides by EPA SW 846 Method 8081A. All pesticide data were assessed to be valid since none of the 1242 total results were rejected based on holding time or QC exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCC criteria and evaluated based on the DQOs.

4.1 Precision and Accuracy

4.1.1 Instrument Calibration

Initial and continuing calibration results provide a means of evaluating accuracy within a particular SDG. Percent relative standard deviation (%RSD) and percent difference (%D) are the two major parameters used to measure the effectiveness of instrument calibration. %RSD is an indication of deviation of individual calibration standards compared to the average response of the initial multi-point instrument calibration. %D is a comparison of a continuing calibration instrumental response with its initial response. %RSD and %D exceedances suggest more routine instrumental anomalies, which typically impact all sample results for the affected compounds.

The %RSDs in the initial calibration met the acceptance criteria of 20 percent for selected compounds. In the case where %RSD was greater than 20 percent, a calibration curve was established for quantitation. The coefficient of determination (r^2) met the acceptance criteria of ≥ 0.990 . The %Ds in the initial calibration verification met the acceptance criteria of 20 percent.

Twenty-one results were qualified as non-detected estimated (UJ). The %Ds between the initial calibration and the continuing calibration concentrations were outside the acceptance criteria of 15 percent. The affected compounds were 4,4'-DDT, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC, and chlordane. The details regarding the qualification of results are presented in Attachments E & F, Section IV.

4.1.2 Surrogates

All surrogate %Rs met the acceptance criteria.

4.1.3 MS/MSD Samples

All water MS/MSD %Rs and RPDs met the acceptance criteria.

Due to low MS/MSD %Rs, the 4,4'-DDT result for soil samples RB-11-100 and the 2,4'-DDT result for soil sample RB-15-82 were qualified as detected estimated (J-).The details regarding the qualification of results are presented in Attachment E, Section VII.

4.1.4 LCS Samples

All LCS/LCSD %Rs and RPDs met the acceptance criteria.

4.1.5 Field Duplicate Samples

The field duplicate samples were evaluated for acceptable precision with RPDs for the compounds. Sample data were not qualified on the basis of field duplicate precision. The field duplicates are presented in Attachment F, Section XIV.

4.1.6 Compound Quantitation and Target Identification

All compound quantitation and target identification were found to be acceptable.

4.2 Representativeness

4.2.1 Holding Times

The evaluation of holding times to verify compliance with the method was conducted. All holding times were met.

4.2.2 Blanks

As previously discussed in Section 2.2.2, method blanks were analyzed to evaluate representativeness.

4.2.2.1 Method Blanks

No contaminants were detected in the method blanks for this analysis.

4.3 Comparability

The laboratory used standard analytical methods for all of the analyses. In all cases, the method detection limits attained were at or below the reporting limit. Target compounds detected below the reporting limits flagged (J) by the laboratory should be considered estimated. The comparability of the data is regarded as acceptable.

4.4 Completeness

The completeness level attained for chlorinated pesticide field samples was 100 percent. This percentage was calculated as the total number of accepted sample results divided by the total number of sample results multiplied by 100.

5.0 ORGANIC ACIDS

A total of 4 water samples were analyzed for organic acids by HPLC Method. All organic acid data were assessed to be valid since none of the 20 total results were rejected based on holding time and QC exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCC criteria and evaluated based on the DQOs.

5.1 Precision and Accuracy

5.1.1 Instrument Calibration

As previously discussed in Section 4.1.1, initial and continuing calibration results provide a means of evaluating accuracy.

The %RSDs in the initial calibration met the acceptance criteria of 20 percent. The %Ds in the initial calibration verification and the continuing calibration met the acceptance criteria of 30 and 20 percent, respectively.

5.1.2 MS/MSD Samples

MS/MSDs were not performed for the water samples. Since the LCS/LCSD %Rs and RPDs met the acceptance criteria, the absence of MS/MSD samples was judged to have no impact on the data quality and no qualifications were made.

5.1.3 LCS Samples

All LCS/LCSD %Rs and RPDs were within acceptance criteria.

5.1.4 Field Duplicate Samples

The field duplicate samples were evaluated for acceptable precision with RPDs for the compounds. Sample data were not qualified on the basis of field duplicate precision. The field duplicates are presented in Attachment G, Section IX.

5.1.5 Compound Quantitation and Target Identification

All compound quantitation and target identification were found to be acceptable.

5.2 Representativeness

5.2.1 Holding Times

The evaluation of holding times to verify compliance with the method was conducted. All holding times were met.

5.2.2 Blanks

As previously discussed in Section 2.2.2, method blanks were analyzed to evaluate representativeness.

5.2.2.1 Method Blanks

No contaminants were detected in the method blanks for this analysis.

5.3 Comparability

The laboratory used standard analytical methods for all of the analyses. In all cases, the method detection limits attained were at or below the reporting limit. Target compounds detected below the reporting limits flagged (J) by the laboratory should be considered estimated. The comparability of the data is regarded as acceptable.

5.4 Completeness

The completeness level attained for organic acid field samples was 100 percent. This percentage was calculated as the total number of accepted sample results divided by the total number of sample results multiplied by 100.

6.0 SPECIFIC GRAVITY

A total of 4 water samples were analyzed for specific gravity by Standard Method 2710-F. All wet chemistry data were assessed to be valid since none of the 4 total results were rejected based on holding time and QC exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCC criteria and evaluated based on the DQOs.

6.1 Precision and Accuracy

6.1.1 Instrument Calibration

As previously discussed in Section 4.1.1, initial and continuing calibration results provide a means of evaluating accuracy.

The daily check met the acceptance criteria for balance checks.

6.1.2 Duplicate (DUP) Samples

All DUP RPDs met the acceptance criteria.

6.1.6 Sample Result Verification

All compound quantitation and target identification were found to be acceptable.

6.2 Representativeness

6.2.1 Holding Times

The evaluation of holding times to verify compliance with the method was conducted. All holding times were met.

6.3 Comparability

The laboratory used standard analytical methods for all of the analyses. In all cases, the method detection limits attained were at or below the reporting limit. Target analytes detected below the reporting limits flagged (J) by the laboratory should be considered estimated. The comparability of the data is regarded as acceptable.

6.4 Completeness

The completeness level attained for specific gravity samples was 100 percent. This percentage was calculated as the total number of accepted sample results divided by the total number of sample results multiplied by 100.

7.0 VARIANCES IN ANALYTICAL PERFORMANCE

The laboratory used standard analytical methods for all of the analyses throughout the project. No systematic variances in analytical performance were noted according to the laboratory case narratives.

8.0 SUMMARY OF PARCC CRITERIA

The validation reports present the PARCC results for all SDGs. Each PARCC criterion is discussed in detail in the following sections.

8.1 Precision and Accuracy

Precision and accuracy were evaluated using data quality indicators such as calibration, surrogates, MS/MSD, LCS, and internal standards. The precision and accuracy of the data set were considered acceptable after integration of qualification of estimated results as noted in Sections 2.1.1, 2.1.2, 2.1.4, 2.1.5, 3.1.1, 3.1.3, 3.1.4, 3.1.5, 4.1.1 and 4.1.3.

8.2 Representativeness

All samples for each method and matrix were evaluated for holding time compliance. All samples were associated with a method blank in each individual SDG. The representativeness of the project data is considered acceptable.

8.3 Comparability

Sampling frequency requirements were met in obtaining duplicates and necessary field blanks. The laboratory used a standard analytical method for the analysis. The analytical results were reported in correct standard units. Holding times, sample preservation, and sample integrity were within QC criteria with the exceptions noted in Sections 2.2.1 and 3.2.1. The overall comparability is considered acceptable.

8.4 Completeness

Of the 9468 total analytes reported, no sample result was rejected. The completeness for the SDG is as follows:

Parameter	Total Analytes	No. of Rejects	% Completeness
VOC	3680	0	100
SVOC	4522	0	100
Chlorinated Pesticides	1242	0	100
Organic Acids	20	0	100
Specific Gravity	4	0	100
Total	9468	0	100

The completeness percentage based on rejected data met the 90 percent DQO goal. A less quantifiable loss of data occurred in the application of blank qualifications as noted in Section 2.2.2.1.

9.0 CONCLUSIONS AND RECOMMENDATIONS

The data quality assessment for the laboratory analytical results generated for the DNAPL Step-Out Boring/Groundwater Investigation, Spring 2008, conducted in accordance with the *Supplemental Soil Investigation Work Plan* and the *Supplemental Groundwater Investigation Work Plan* at the Montrose Chemical Corporation of California site (Montrose Site) in Henderson, Nevada established that the overall project requirements and completeness levels were met. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the level III and level IV data validation all other results are considered valid and usable for all purposes.

10.0 REFERENCES

Quality Assurance Project Plan Site-wide Soil and Groundwater Investigations Former Montrose and Stauffer Sites, Henderson, Nevada (QAPP), Revision 1.0, October 26, 2006,

Hargis + Associates, Inc., *Supplemental Groundwater Investigation Work Plan, Montrose Chemical Corporation of California, Henderson, Nevada, August 31, 2006,*

Hargis + Associates, Inc., *Supplemental Soil Investigation Work Plan, Montrose Chemical Corporation of California, Henderson, Nevada, August 30, 2006,*

Technical Memorandum, Plan for Additional DNAPL Reconnaissance Borings as part of the *Montrose Supplemental Groundwater Investigation Work Plan*, February 16, 2007,

USEPA 1999. *Contract Laboratory Program National Functional Guidelines for Organic Data Review*, October 1999,

USEPA 2004. *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004,

_____, 1996. *EPA SW 846 Third Edition, Test Methods for Evaluating Solid Waste, update I, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December; update IV, February 2007.*

TABLE IA

SAMPLE CROSS-REFERENCE						
		Parameters/Analytical Method				
Client ID #	Lab ID #	Matrix	QC Type	Date Collected	VOC (8260B)	SVOC (8270C)
RB-10-10	IRC1701-01	soil		03/20/08	X	X
RB-10-20	IRC1701-02	soil		03/20/08	X	X
RB-10-30	IRC1701-03	soil		03/20/08	X	X
RB-10-40	IRC1701-04	soil		03/20/08	X	X
RB-10-50	IRC1701-05	soil		03/20/08	X	X
RB-10-60	IRC1701-06	soil		03/20/08	X	X
RB-10-70	IRC1701-07	soil		03/20/08	X	X
RB-10-80	IRC1701-08	soil		03/20/08	X	X
RB-10-90	IRC1701-09	soil		03/20/08	X	X
RB-10-100	IRC1701-10	soil		03/20/08	X	X
RB-10-110	IRC1701-11	soil		03/20/08	X	X

SDG#:

IRC1701

LDC#:

186687A

Project Name: DNAPL Step-Out Boring Investigation, Spring 2008

Project#:

732.58

Shaded samples underwent Level IV validation
 TB = Trip Blank, ER = Equipment Rinsate, EB = Equipment Blank, FB = Field Blank,
 FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, DUP = Duplicate,
 RE = Reanalysis/Reextraction, PE = Performance Evaluation Sample

SAMPLE CROSS-REFERENCE						
Project Name: DNAPL Step-Out Boring Investigation, Spring 2008			Parameters/Analytical Method			
Client ID #	Lab ID #	Matrix	QC Type	Date Collected	VOC (8260B)	SVOC (8270C)
RB-10-120	IRC1780-01	soil		03/21/08	X	X
RB-10-130	IRC1780-02	soil		03/21/08	X	X
RB-10-140	IRC1780-03	soil		03/21/08	X	X
RB-10-150	IRC1780-04	soil		03/21/08	X	X
RB-10-120MS	IRC1780-01MS	soil	MS	03/21/08		X
RB-10-120MSD	IRC1780-01MSD	soil	MSD	03/21/08		X
RB-10-150MS	IRC1780-04MS	soil	MS	03/21/08		X
RB-10-150MSD	IRC1780-04MSD	soil	MSD	03/21/08		X

Shaded samples underwent Level IV validation

TB = Trip Blank, ER = Equipment Rinsate, EB = Equipment Blank, FB = Field Blank,
 FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, DUP = Duplicate,
 RE = Reanalysis/Reextraction, PE = Performance Evaluation Sample

SAMPLE CROSS-REFERENCE						
Project Name: DNAPL Step-Out Boring Investigation, Spring 2008		Parameters/Analytical Method				
Client ID #	Lab ID #	Matrix	QC Type	Date Collected	VOC (8260B)	SVOC (8270C)
RB-11-10	IRC2145-01	soil		03/26/08	X	X
RB-11-20	IRC2145-02	soil		03/26/08	X	X
RB-11-30	IRC2145-03	soil		03/26/08	X	X
RB-11-40	IRC2145-04	soil		03/26/08	X	X
RB-11-50	IRC2145-05	soil		03/26/08	X	X
RB-11-60	IRC2145-06	soil		03/26/08	X	X
RB-11-70	IRC2145-07	soil		03/26/08	X	X
RB-11-80	IRC2145-08	soil		03/26/08	X	X
RB-11-90	IRC2145-09	soil		03/26/08	X	X
RB-11-10MS	IRC2145-01MS	soil	MS	03/26/08		X
RB-11-10MSD	IRC2145-01MSD	soil	MSD	03/26/08		X
RB-11-20MS	IRC2145-02MS	soil	MS	03/26/08		X
RB-11-20MSD	IRC2145-02MSD	soil	MSD	03/26/08		X

Shaded samples underwent Level IV validation
TB = Trip Blank, ER = Equipment Rinsate, EB = Equipment Blank, FB = Field Blank,
FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, DUP = Duplicate,
RE = Reanalysis/Reextraction, PE = Performance Evaluation Sample

SAMPLE CROSS-REFERENCE							
Project Name: DNAPL Step-Out Boring Investigation, Spring 2008				Parameters/Analytical Method			
Client ID #	Lab ID #	Matrix	QC Type	Date Collected	VOC (8260B)	SVOC (8270C)	Pest. (8081A)
RB-11-100	IRC2246-01	soil		03/27/08	X	X	X
RB-11-110	IRC2246-02	soil		03/27/08	X	X	X
RB-11-120	IRC2246-03	soil		03/27/08	X	X	X
RB-11-130	IRC2246-04	soil		03/27/08	X	X	X
RB-11-140	IRC2246-05	soil		03/27/08	X	X	X
RB-11-100MS	IRC2246-01MS	soil	MS	03/27/08	X	X	
RB-11-100MSD	IRC2246-01MSD	soil	MSD	03/27/08	X	X	

Shaded samples underwent Level IV validation

TB = Trip Blank, ER = Equipment Rinsate, EB = Equipment Blank, FB = Field Blank,
FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, DUP = Duplicate,
RE = Reanalysis/Reextraction, PE = Performance Evaluation Sample

SDG#: IRD0785

Project Name: DNAPL Step-Out Boring Investigation, Spring 2008

SAMPLE CROSS-REFERENCE

LDC# 18708A

Project# 732.58

Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	VOC (8266B)	SVOC (8270C)	Pest. (8081A)
RB-17-10	IRD0785-01	soil		04/08/08	X	X	X
RB-17-20	IRD0785-02	soil		04/08/08	X	X	X
RB-17-30	IRD0785-03	soil		04/08/08	X	X	X
RB-17-40	IRD0785-04	soil		04/08/08	X	X	X
RB-17-50	IRD0785-05	soil		04/08/08	X	X	X
RB-17-60	IRD0785-06	soil		04/08/08	X	X	X
RB-17-70	IRD0785-07	soil		04/08/08	X	X	X
RB-17-80	IRD0785-08	soil		04/08/08	X	X	X
RB-17-90	IRD0785-09	soil		04/08/08	X	X	X
RB-17-100	IRD0785-10	soil		04/08/08	X	X	X
RB-17-110	IRD0785-11	soil		04/08/08	X	X	X
RB-17-10MS	IRD0785-01MS	soil	MS	04/08/08	X	X	X
RB-17-10MSD	IRD0785-01MSD	soil	MSD	04/08/08	X	X	X

Shaded samples underwent Level IV validation
TB = Trip Blank, ER = Equipment Rinsate, EB = Equipment Blank, FB = Field Blank,
FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, DUP = Duplicate,
RE = Reanalysis/Reextraction, PE = Performance Evaluation Sample

SAMPLE CROSS-REFERENCE							
SDG#:		Project Name:		Parameters/Analytical Method			
Client ID #	Lab ID #	Matrix	QC Type	Date Collected	VOC (8260B)	SVOC (8270C)	Pest. (8081A)
RB-15-10	IRD0923-01	soil		04/09/08	X	X	X
RB-15-20	IRD0923-02	soil		04/09/08	X	X	X
RB-15-30	IRD0923-03	soil		04/09/08	X	X	X
RB-15-40	IRD0923-04	soil		04/09/08	X	X	X
RB-15-60	IRD0923-05	soil		04/09/08	X	X	X
RB-15-70	IRD0923-06	soil		04/09/08	X	X	X
RB-15-10MS	IRD0923-01MS	soil	MS	04/09/08		X	X
RB-15-10MSD	IRD0923-01MSD	soil	MSD	04/09/08		X	X

6

Shaded samples underwent Level IV validation
TB = Trip Blank, ER = Equipment Rinsate, EB = Equipment Blank, FB = Field Blank,
FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, DUP = Duplicate,
RE = Reanalysis/Reextraction, PE = Performance Evaluation Sample

SAMPLE CROSS-REFERENCE							
SDG#: IRD1075		Project Name: DNAPL Step-Out Boring Investigation, Spring 2008					
		Parameters/Analytical Method					
Client ID #	Lab ID #	Matrix	QC Type	Date Collected	VOC (8260B)	SVOC (8270C)	Pest. (8081A)
RB-15-82	IRD1075-01	soil		04/10/08	X	X	X
RB-15-90	IRD1075-02	soil		04/10/08	X	X	X
RB-15-100	IRD1075-03	soil		04/10/08	X	X	X
RB-15-110	IRD1075-04	soil		04/10/08	X	X	X
RB-15-82MS	IRD1075-01MS	soil	MS	04/10/08	X	X	X
RB-15-82MSD	IRD1075-01MSD	soil	MSD	04/10/08	X	X	X

Shaded samples underwent Level IV validation
TB = Trip Blank, ER = Equipment Rinsate, EB = Equipment Blank, FB = Field Blank,
FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, DUP = Duplicate,
RE = Reanalysis/Reextraction, PE = Performance Evaluation Sample

TABLE IB

SAMPLE CROSS-REFERENCE								LDCC#: 18945A	
Project Name: DNAPL Step-Out Groundwater Investigation, Spring 2008								Project#: 732.58	
Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Parameters/Analytical Method			Spec. Grav. (2710F)	
					VOC (8260B)	SVOC (8270C)	Pest. (8081A)		
TB-050808	IRE0948-01	water	TB	05/08/08	X				
PL-501-0508	IRE0948-02	water	EB	05/08/08	X				
MC-MW-15-0508	IRE0948-03	water	FD	05/08/08	X	X	X	X	
PL-502-0508	IRE0948-04	water	FD	05/08/08	X	X	X	X	
PL-503-0508	IRE0948-05	water	FB	05/08/08	X				
MC-MW-17-0508	IRE0948-06	water		05/08/08	X	X	X	X	
MC-MW-18-0508	IRE0948-07	water		05/08/08	X	X	X	X	
PL-504-0508	IRE0948-08	water	EB	05/08/08	X				
MC-MW-17-0508MS	IRE0948-06MS	water	MS	05/08/08	X				
MC-MW-17-0508MSD	IRE0948-06MSD	water	MSD	05/08/08	X				
MC-MW-17-0508DUP	IRE0948-06DUP	water	DUP	05/08/08				X	

Shaded samples underwent Level IV validation

TB = Trip Blank, ER = Equipment Rinsate, EB = Equipment Blank, FB = Field Blank,
 FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, DUP = Duplicate,
 RE = Reanalysis/Reextraction, PE = Performance Evaluation Sample

Table II. Reason Codes and Definitions

Code	Definition
1	Holding Times
2	Sample Preservation (i.e. Headspace, Cooler Temp)
3	Sample Custody
4	Missing Deliverables
5	Calibration
6	Field Blanks
7	Laboratory Blanks
8	Matrix Spike (%)
9	Matrix Spike Duplicate or Duplicate Sample (RPD)
10	Laboratory Control Sample
11	ICP Interference Check
12	RPD Between Two Columns
13	Surrogates
14	Field Duplicates
15	Furnace QC
16	ICP Serial Dilution
17	Chemical Recoveries
18	Trip Blanks
19	Internal Standards
20	Linear Range Exceeded
21	Potential False Positives
22	Do not use, other result more technically sound
23	Other

Table IIIA. Overall Qualified Soil Results

Client SDG	Sample ID	Lab Sample ID	Sample Date	Matrix	Method	Analyte	Lab Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRC1701	RB-10-10	IRC1701-01	03/20/08	Soil	EPA 8260B	Chloromethane	4.8	U	ug/kg	UJ	5
IRC1701	RB-10-10	IRC1701-01	03/20/08	Soil	EPA 8260B	2-Butanone (MEK)	9.6	U	ug/kg	UJ	5
IRC1701	RB-10-10	IRC1701-01	03/20/08	Soil	EPA 8260B	Acetone	9.6	U	ug/kg	UJ	5
IRC1701	RB-10-20	IRC1701-02	03/20/08	Soil	EPA 8260B	Acetone	10	U	ug/kg	UJ	5
IRC1701	RB-10-20	IRC1701-02	03/20/08	Soil	EPA 8260B	2-Butanone (MEK)	10	U	ug/kg	UJ	5
IRC1701	RB-10-20	IRC1701-02	03/20/08	Soil	EPA 8260B	Chloromethane	5.1	U	ug/kg	UJ	5
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	trans-1,2-Dichloroethene	1.8	U	ug/kg	UJ	19
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	Bromo-chloromethane	4.6	U	ug/kg	UJ	19
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	Bromomethane	4.6	U	ug/kg	UJ	19
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	Chloroethane	4.6	U	ug/kg	UJ	19
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	Chloromethane	4.6	U	ug/kg	UJ	19
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	Dichlorodifluoromethane	4.6	U	ug/kg	UJ	19
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	1,1-Dichloroethane	1.8	U	ug/kg	UJ	19
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	Acetone	4.6	U	ug/kg	UJ	19
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	cis-1,2-Dichloroethene	1.8	U	ug/kg	UJ	19
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	2-Butanone (MEK)	9.2	U	ug/kg	UJ	5,19
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	2,2-Dichloropropane	1.8	U	ug/kg	UJ	19
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	Methylene chloride	18	U	ug/kg	UJ	19
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	Tetrachloroethene	1.5	J	ug/kg	J+	13
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	1,1,1-Trichloroethane	1.8	U	ug/kg	UJ	19
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	Trichlorofluoromethane	4.6	U	ug/kg	UJ	19
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	Vinyl chloride	4.6	U	ug/kg	UJ	19
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	Methyl-tert-butyl Ether (MTBE)	4.6	U	ug/kg	UJ	19
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	1,1-Dichloroethene	4.6	U	ug/kg	UJ	19
IRC1701	RB-10-30	IRC1701-03	03/20/08	Soil	EPA 8260B	Chloroform	140	U	ug/kg	J	13,19
IRC1701	RB-10-40	IRC1701-04	03/20/08	Soil	EPA 8260B	Chloroform	170	U	ug/kg	J+	13
IRC1701	RB-10-40	IRC1701-04	03/20/08	Soil	EPA 8260B	2-Butanone (MEK)	9.7	U	ug/kg	UJ	5
IRC1701	RB-10-40	IRC1701-04	03/20/08	Soil	EPA 8260B	Tetrachloroethene	1.6	J	ug/kg	J+	13
IRC1701	RB-10-50	IRC1701-05	03/20/08	Soil	EPA 8260B	2-Butanone (MEK)	9	U	ug/kg	UJ	5
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	2-Hexanone	480	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	4-Methyl-2-pentanone (MIBK)	480	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	1,2-Dibromo-3-chloropropane	240	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	trans-1,3-Dichloropropene	96	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	1,3-Dichloropropane	96	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	Bromomethane	240	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	Styrene	96	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	1,1,2-Tetrachloroethane	240	U	ug/kg	UJ	10

Table IIIA. Overall Qualified Soil Results

SDG	Client Sample ID	Lab Sample ID	Sample Date	Matrix	Method	Analyte	Lab Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	1,2-Dichloroethane	96	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	Dichlorodifluoromethane	190	U	ug/kg	UJ	5
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	Naphthalene	240	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	1,2,3-Trichloropropane	480	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	Bromoform	240	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	Bromodichloromethane	96	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	Bromochloromethane	240	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	Dibromomethane	96	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	Vinyl chloride	240	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	1,2-Dibromoethane (EDB)	96	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	2-Butanone (MEK)	960	U	ug/kg	UJ	5,10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	Carbon tetrachloride	80	J	ug/kg	J	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	Chloroethane	240	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	1,1,1-Trichloroethane	96	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	Dibromochloromethane	96	U	ug/kg	UJ	10
IRC1701	RB-10-60	IRC1701-06	03/20/08	Soil	EPA 8260B	Acetone	1400	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	Chloroethane	240	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	Carbon tetrachloride	240	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	Dibromomethane	95	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	Naphthalene	240	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	4-Methyl-1-pentanone (MIBK)	470	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	2-Hexanone	470	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	trans-1,3-Dichloropropene	95	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	1,2-Dichloroethane	95	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	1,2-Dibromo-3-chloropropane	240	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	Dibromochloromethane	95	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	Styrene	95	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	2-Butanone (MEK)	950	U	ug/kg	UJ	5,10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	Vinyl chloride	240	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	1,2-Dibromoethane (EDB)	95	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	1,2,3-Trichloropropane	470	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	1,1,1-Trichloroethane	95	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	1,1,2-Tetrachloroethane	240	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	1,3-Dichloropropane	95	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	Bromomethane	240	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	Bromoform	240	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	Bromodichloromethane	95	U	ug/kg	UJ	10

Table IIIA. Overall Qualified Soil Results

SDG	Client Sample ID	Lab Sample ID	Date	Sample Matrix	Method	Analyte	Lab Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	Bromo-chloromethane	240	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	Acetone	1400	U	ug/kg	UJ	10
IRC1701	RB-10-70	IRC1701-07	03/20/08	Soil	EPA 8260B	Dichlorodifluoromethane	190	U	ug/kg	UJ	5
IRC1701	RB-10-80	IRC1701-08	03/20/08	Soil	EPA 8260B	2-Butanone (MEK)	13000	U	ug/kg	UJ	5
IRC1701	RB-10-80	IRC1701-08	03/20/08	Soil	EPA 8260B	Vinyl chloride	3100	U	ug/kg	UJ	10
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,3-Dichloropropane	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	2,2-Dichloropropane	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,1-Dichloropropane	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,2-Dichloropropane	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	trans-1,3-Dichloropropene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,1-Dichloroethane	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Ethylbenzene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Hexachlorobutadiene	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	cis-1,3-Dichloropropene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	trans-1,2-Dichloroethene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	cis-1,2-Dichloroethene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	2-Hexanone	12	U	ug/kg	UJ	5,13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,2-Dichloroethane	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Methylene chloride	23	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Dichlorodifluoromethane	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,3-Dichlorobenzene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Dibromomethane	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,2-Dibromoethane (EDB)	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,2-Dibromo-3-chloropropane	5.8	U	ug/kg	UJ	5,13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Dibromo-chloromethane	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,1-Dichloroethene	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,2,3-Trichlorobenzene	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Methyl-tert-butyl Ether (MTBE)	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	m,p-Xylenes	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	o-Xylene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Vinyl chloride	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,3,5-Trimethylbenzene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,2,4-Trimethylbenzene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,2,3-Trichloropropane	12	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Trichlorofluoromethane	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Trichloroethene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,1,2-Trichloroethane	2.3	U	ug/kg	UJ	13

Table IIIA. Overall Qualified Soil Results

SDG	Client Sample ID	Lab Sample ID	Sample Date	Matrix	Method	Analyte	Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Isopropylbenzene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,2,4-Trichlorobenzene	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	4-Chlorotoluene	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Toluene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Tetrachloroethene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,1,2,2-Tetrachloroethane	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,1,1,2-Tetrachloroethane	5.8	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Syrene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	n-Propylbenzene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Naphthalene	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	4-Methyl-2-pentanone (MBK)	5.8	U	ug/kg	UJ	5,13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,2-Dichlorobenzene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	p-Isopropyltoluene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,1,1-Trichloroethane	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Bromochloromethane	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	2-Chlorotoluene	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	1,4-Dichlorobenzene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Acetone	1.2	U	ug/kg	UJ	5,13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Bromobenzene	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Bromodichloromethane	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Bromoform	5.8	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Bromomethane	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	n-Butylbenzene	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	sec-Butylbenzene	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	tert-Butylbenzene	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Carbon tetrachloride	5.8	U	ug/kg	UJ	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Chloromethane	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Chlorobenzene	34	J	ug/kg	J	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Chloroethane	5.8	U	ug/kg	UJ	13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	2-Butanone (MEK)	12	U	ug/kg	UJ	5,13,19
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Benzene	13	J	ug/kg	J	13
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8260B	Chloroform	92	J	ug/kg	J	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	2-Hexanone	10	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,2-Dichloropropane	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,3-Dichloropropane	2.1	U	ug/kg	UJ	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	2,2-Dichloropropane	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,1-Dichloropropene	2.1	U	ug/kg	UJ	13

Table IIIA. Overall Qualified Soil Results

SDG	Client Sample ID	Lab Sample ID	Date	Sample Matrix	Method	Analyte	Lab Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	trans-1,3-Dichloropropene	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Hexachlorobutadiene	5.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	trans-1,2-Dichloroethene	2.1	U	ug/kg	UJ	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,2-Dibromoethane (EDB)	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Ethylbenzene	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	cis-1,2-Dichloroethene	2.1	U	ug/kg	UJ	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,1-Dichloroethene	5.1	U	ug/kg	UJ	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,2-Dichloroethane	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,1-Dichloroethane	2.1	U	ug/kg	UJ	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Dichlorodifluoromethane	5.1	U	ug/kg	UJ	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,4-Dichlorobenzene	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,3-Dichlorobenzene	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Isopropylbenzene	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Dibromomethane	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Toluene	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Methyl-tert-butyl Ether (MTBE)	5.1	U	ug/kg	UJ	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,2-Dibromo-3-chloropropane	5.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,2-Dichlorobenzene	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Dibromochloromethane	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	m,p-Xylenes	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	o-Xylene	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Vinyl chloride	5.1	U	ug/kg	UJ	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,3,5-Trimethylbenzene	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,2,4-Trimethylbenzene	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,2,3-Trichloropropane	10	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Trichlorofluoromethane	5.1	U	ug/kg	UJ	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Trichloroethene	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,1,2-Trichloroethane	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,1,2,2-Tetrachloroethane	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,2,4-Trichlorobenzene	5.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	p-Isopropyltoluene	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,2,3-Trichlorobenzene	5.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Chlorobenzene	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Tetrachloroethene	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,1,1,2-Tetrachloroethane	5.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	cis-1,3-Dichloropropene	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Styrene	2.1	U	ug/kg	UJ	13

Table IIIA. Overall Qualified Soil Results

SDG	Client Sample ID	Lab Sample ID	Date	Sample Matrix	Method	Analyte	Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	n-Propylbenzene	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Naphthalene	5.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	4-Methyl-2-pentanone (MBK)	5.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Methylene chloride	21	U	ug/kg	UJ	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	1,1,1-Trichloroethane	2.1	U	ug/kg	UJ	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Bromochloromethane	5.1	U	ug/kg	UJ	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	4-Chlorotoluene	5.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Chloroform	2.1	U	ug/kg	UJ	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Acetone	10	U	ug/kg	UJ	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Bromobenzene	5.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Bromodichloromethane	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Bromoform	5.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Bromomethane	5.1	U	ug/kg	UJ	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Chloroethane	5.1	U	ug/kg	UJ	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	2-Chlorotoluene	5.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Benzene	2.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Chloromethane	5.1	U	ug/kg	UJ	13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	2-Butanone (MEK)	10	U	ug/kg	UJ	5,13,19
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	Carbon tetrachloride	5.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	tert-Butylbenzene	5.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	sec-Butylbenzene	5.1	U	ug/kg	UJ	13
IRC1701	RB-10-100	IRC1701-10	03/20/08	Soil	EPA 8260B	n-Butylbenzene	5.1	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	trans-1,2-Dichloroethene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Hexachlorobutadiene	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,2-Dibromoethane (EDB)	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	trans-1,3-Dichloropropene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	cis-1,3-Dichloropropene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,1-Dichloropropene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	2,2-Dichloropropane	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,3-Dichloropropane	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,2-Dichloropropane	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Ethylbenzene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	cis-1,2-Dichloroethene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,1-Dichloroethene	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,2-Dichloroethane	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,1-Dichloroethane	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Dichlorodifluoromethane	5.7	U	ug/kg	UJ	13,19

Table IIIA. Overall Qualified Soil Results

Client SDG	Sample ID	Lab Sample ID	Date	Sample Matrix	Method	Analyte	Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,4-Dichlorobenzene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,3-Dichlorobenzene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	2-Hexanone	11	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Dibromomethane	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,2-Dibromo-3-chloropropane	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Dibromochloromethane	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,2-Dichlorobenzene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,2,4-Trichlorobenzene	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Methyl-tert-butyl Ether (MTBE)	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	m,p-Xylenes	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	o-Xylene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Vinyl chloride	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,3,5-Trimethylbenzene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,2,4-Trimethylbenzene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,2,3-Trichloropropane	11	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Trichlorofluoromethane	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Trichloroethene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,1,2,2-Tetrachloroethane	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,1,1-Trichloroethane	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Isopropylbenzene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,2,3-Trichlorobenzene	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Toluene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	n-Propylbenzene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Tetrachloroethene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	4-Chlorotoluene	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Styrene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Naphthalene	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	4-Methyl-2-pentanone (MIBK)	5.7	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Methylene chloride	23	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	P-Isopropyltoluene	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,1,2-Trichloroethane	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Acetone	11	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	1,1,1,2-Tetrachloroethane	5.7	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	2-Chlorotoluene	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Benzene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Bromobenzene	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Bromochloromethane	5.7	U	ug/kg	UJ	13,19

Table IIIA. Overall Qualified Soil Results

SDG	Client Sample ID	Lab Sample ID	Date	Sample Matrix	Method	Analyte	Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Bromodichloromethane	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Bromoform	5.7	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Bromomethane	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Chloroethane	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	n-Butylbenzene	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	sec-Butylbenzene	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	tert-Butylbenzene	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Carbon tetrachloride	5.7	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Chlorobenzene	2.3	U	ug/kg	UJ	13
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Chloroform	2.3	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	Chloromethane	5.7	U	ug/kg	UJ	13,19
IRC1701	RB-10-110	IRC1701-11	03/20/08	Soil	EPA 8260B	2-Butanone (MEK)	11	U	ug/kg	UJ	5,13,19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	1,4-Dichlorobenzene	2.4	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	Dichlorodifluoromethane	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	1,1-Dichloroethane	2.4	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	1,1-Dichloroethene	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	trans-1,2-Dichloroethene	2.4	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	Chloromethane	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	2,2-Dichloropropane	2.4	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	cis-1,2-Dichloroethene	2.4	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	1,2-Dichlorobenzene	2.4	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	tert-Butylbenzene	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	2-Chlorotoluene	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	Chloroform	2.4	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	Chloroethane	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	Hexachlorobutadiene	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	1,2,4-Trichlorobenzene	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	4-Chlorotoluene	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	1,2,3-Trichlorobenzene	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	Methyl-tert-butyl Ether (MTBE)	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	Vinyl chloride	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	1,3,5-Trimethylbenzene	2.4	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	1,2,4-Trimethylbenzene	2.4	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	1,2,3-Trichloropropane	12	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	Trichlorofluoromethane	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	1,1,2,2-Tetrachloroethane	2.4	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	1,2-Dibromo-3-chloropropane	6.1	U	ug/kg	UJ	5,19

Table IIIA. Overall Qualified Soil Results

SDG	Client Sample ID	Lab Sample ID	Date	Sample Matrix	Method	Analyte	Lab Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	2-Hexanone	12	U	ug/kg	UJ	5
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	sec-Butylbenzene	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	n-Propylbenzene	2.4	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	Naphthalene	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	4-Methyl-2-pentanone (MBK)	6.1	U	ug/kg	UJ	5
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	Methylene chloride	24	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	p-Isopropyltoluene	2.4	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	Isopropylbenzene	2.4	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	1,1,1-Trichloroethane	2.4	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	2-Butanone (MEK)	12	U	ug/kg	UJ	5,19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	Bromomethane	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	Bromo-chloromethane	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	Bromobenzene	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	Acetone	12	U	ug/kg	UJ	5,19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	1,3-Dichlorobenzene	2.4	U	ug/kg	UJ	19
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8260B	n-Butylbenzene	6.1	U	ug/kg	UJ	19
IRC1780	RB-10-130	IRC1780-02	03/21/08	Soil	EPA 8260B	2-Butanone (MEK)	9.7	U	ug/kg	UJ	5
IRC1780	RB-10-130	IRC1780-02	03/21/08	Soil	EPA 8260B	Dichlorodifluoromethane	4.8	U	ug/kg	UJ	5
IRC1780	RB-10-140	IRC1780-03	03/21/08	Soil	EPA 8260B	2-Butanone (MEK)	11	U	ug/kg	UJ	5
IRC1780	RB-10-140	IRC1780-03	03/21/08	Soil	EPA 8260B	Dichlorodifluoromethane	5.4	U	ug/kg	UJ	5
IRC1780	RB-10-150	IRC1780-04	03/21/08	Soil	EPA 8260B	4-Methyl-2-pentanone (MBK)	5.1	U	ug/kg	UJ	5
IRC1780	RB-10-150	IRC1780-04	03/21/08	Soil	EPA 8260B	2-Hexanone	10	U	ug/kg	UJ	5
IRC1780	RB-10-150	IRC1780-04	03/21/08	Soil	EPA 8260B	1,2-Dibromo-3-chloropropane	5.1	U	ug/kg	UJ	5
IRC1780	RB-10-150	IRC1780-04	03/21/08	Soil	EPA 8260B	2-Butanone (MEK)	10	U	ug/kg	UJ	5
IRC1780	RB-10-150	IRC1780-04	03/21/08	Soil	EPA 8260B	Acetone	10	U	ug/kg	UJ	5
IRC2145	RB-11-10	IRC2145-01	03/26/08	Soil	EPA 8260B	2-Butanone (MEK)	11	U	ug/kg	UJ	5
IRC2145	RB-11-10	IRC2145-01RE1	03/26/08	Soil	EPA 8260B	Acetone	45	U	ug/kg	UJ	7
IRC2145	RB-11-20	IRC2145-02	03/26/08	Soil	EPA 8260B	2-Butanone (MEK)	11	U	ug/kg	UJ	5
IRC2145	RB-11-20	IRC2145-02	03/26/08	Soil	EPA 8260B	Acetone	43	U	ug/kg	UJ	7
IRC2145	RB-11-30	IRC2145-03	03/26/08	Soil	EPA 8260B	2-Butanone (MEK)	1100	U	ug/kg	UJ	5
IRC2145	RB-11-40	IRC2145-04	03/26/08	Soil	EPA 8260B	2-Butanone (MEK)	1100	U	ug/kg	UJ	5
IRC2145	RB-11-50	IRC2145-05	03/26/08	Soil	EPA 8260B	2-Butanone (MEK)	2300	U	ug/kg	UJ	5
IRC2145	RB-11-50	IRC2145-05	03/26/08	Soil	EPA 8260B	Acetone	3400	U	ug/kg	UJ	5
IRC2145	RB-11-50	IRC2145-05	03/26/08	Soil	EPA 8260B	2-Butanone (MEK)	560	U	ug/kg	UJ	10
IRC2145	RB-11-60	IRC2145-06	03/26/08	Soil	EPA 8260B	Vinyl chloride	530	U	ug/kg	UJ	10
IRC2145	RB-11-60	IRC2145-06	03/26/08	Soil	EPA 8260B	2-Butanone (MEK)	2100	U	ug/kg	UJ	5
IRC2145	RB-11-60	IRC2145-06	03/26/08	Soil	EPA 8260B	Acetone	3200	U	ug/kg	UJ	5

Table IIIA. Overall Qualified Soil Results

SDG	Client Sample ID	Lab Sample ID	Sample Date	Matrix	Method	Analyte	Lab Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRC2145	RB-11-70	IRC2145-07	03/26/08	Soil	EPA 8260B	Vinyl chloride	2700	U	ug/kg	UJ	10
IRC2145	RB-11-70	IRC2145-07	03/26/08	Soil	EPA 8260B	2-Butanone (MEK)	11000	U	ug/kg	UJ	5
IRC2145	RB-11-80	IRC2145-08	03/26/08	Soil	EPA 8260B	2-Butanone (MEK)	4100	U	ug/kg	UJ	5
IRC2145	RB-11-80	IRC2145-08	03/26/08	Soil	EPA 8260B	Vinyl chloride	1000	U	ug/kg	UJ	10
IRC2145	RB-11-90	IRC2145-09	03/26/08	Soil	EPA 8260B	Vinyl chloride	3100	U	ug/kg	UJ	10
IRC2145	RB-11-90	IRC2145-09	03/26/08	Soil	EPA 8260B	2-Butanone (MEK)	12000	U	ug/kg	UJ	5
IRC2246	RB-11-100	IRC2246-01	03/27/08	Soil	EPA 8260B	Hexachlorobutadiene	1400	U	ug/kg	UJ	10
IRC2246	RB-11-100	IRC2246-01	03/27/08	Soil	EPA 8260B	2-Butanone (MEK)	5600	U	ug/kg	UJ	5
IRC2246	RB-11-100	IRC2246-01	03/27/08	Soil	EPA 8260B	Acetone	8400	U	ug/kg	UJ	10
IRC2246	RB-11-100	IRC2246-01	03/27/08	Soil	EPA 8260B	Vinyl chloride	1400	U	ug/kg	UJ	10
IRC2246	RB-11-110	IRC2246-02	03/27/08	Soil	EPA 8260B	2-Butanone (MEK)	56000	U	ug/kg	UJ	5
IRC2246	RB-11-110	IRC2246-02	03/27/08	Soil	EPA 8260B	Vinyl chloride	14000	U	ug/kg	UJ	10
IRC2246	RB-11-110	IRC2246-02	03/27/08	Soil	EPA 8260B	Hexachlorobutadiene	14000	U	ug/kg	UJ	10
IRC2246	RB-11-110	IRC2246-02	03/27/08	Soil	EPA 8260B	Acetone	84000	U	ug/kg	UJ	10
IRC2246	RB-11-120	IRC2246-03	03/27/08	Soil	EPA 8260B	Hexachlorobutadiene	300	U	ug/kg	UJ	10
IRC2246	RB-11-120	IRC2246-03	03/27/08	Soil	EPA 8260B	Acetone	1800	U	ug/kg	UJ	10
IRC2246	RB-11-120	IRC2246-03	03/27/08	Soil	EPA 8260B	Vinyl chloride	300	U	ug/kg	UJ	10
IRC2246	RB-11-120	IRC2246-03	03/27/08	Soil	EPA 8260B	2-Butanone (MEK)	1200	U	ug/kg	UJ	5
IRC2246	RB-11-130	IRC2246-04	03/27/08	Soil	EPA 8260B	2-Butanone (MEK)	10	U	ug/kg	UJ	5
IRC2246	RB-11-130	IRC2246-04RE1	03/27/08	Soil	EPA 8260B	Acetone	26	J	ug/kg	U	7
IRC2246	RB-11-140	IRC2246-05	03/27/08	Soil	EPA 8260B	2-Butanone (MEK)	12	U	ug/kg	UJ	5
IRC2246	RB-11-140	IRC2246-05RE1	03/27/08	Soil	EPA 8260B	Acetone	29	J	ug/kg	U	7
IRD0785	RB-17-10	IRD0785-01	04/08/08	Soil	EPA 8260B	2-Butanone (MEK)	6.5	J	ug/kg	J	5,10
IRD0785	RB-17-10	IRD0785-01	04/08/08	Soil	EPA 8260B	Dichlorodifluoromethane	4.9	U	ug/kg	UJ	5
IRD0785	RB-17-10	IRD0785-01RE1	04/08/08	Soil	EPA 8260B	Acetone	28	J	ug/kg	U	7
IRD0785	RB-17-20	IRD0785-02	04/08/08	Soil	EPA 8260B	2-Butanone (MEK)	9.3	U	ug/kg	UJ	5
IRD0785	RB-17-20	IRD0785-02	04/08/08	Soil	EPA 8260B	Dichlorodifluoromethane	4.7	U	ug/kg	UJ	5
IRD0785	RB-17-20	IRD0785-02RE1	04/08/08	Soil	EPA 8260B	Acetone	24	J	ug/kg	U	7
IRD0785	RB-17-30	IRD0785-03	04/08/08	Soil	EPA 8260B	2-Butanone (MEK)	11	U	ug/kg	UJ	5
IRD0785	RB-17-30	IRD0785-03	04/08/08	Soil	EPA 8260B	Dichlorodifluoromethane	5.5	U	ug/kg	UJ	5
IRD0785	RB-17-30	IRD0785-03RE1	04/08/08	Soil	EPA 8260B	Acetone	26	J	ug/kg	U	7
IRD0785	RB-17-40	IRD0785-04	04/08/08	Soil	EPA 8260B	2-Butanone (MEK)	1100	U	ug/kg	UJ	5
IRD0785	RB-17-40	IRD0785-04	04/08/08	Soil	EPA 8260B	Vinyl chloride	270	U	ug/kg	UJ	10
IRD0785	RB-17-50	IRD0785-05	04/08/08	Soil	EPA 8260B	2-Butanone (MEK)	1300	U	ug/kg	UJ	5
IRD0785	RB-17-50	IRD0785-05	04/08/08	Soil	EPA 8260B	Vinyl chloride	330	U	ug/kg	UJ	10
IRD0785	RB-17-60	IRD0785-06	04/08/08	Soil	EPA 8260B	2-Butanone (MEK)	1100	U	ug/kg	UJ	5
IRD0785	RB-17-60	IRD0785-06	04/08/08	Soil	EPA 8260B	Vinyl chloride	270	U	ug/kg	UJ	10

Table IIIA. Overall Qualified Soil Results

SDG	Client Sample ID	Lab Sample ID	Sample Date	Matrix	Method	Analyte	Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRD0785	RB-17-70	IRD0785-07	04/08/08	Soil	EPA 8260B	2-Butanone (MEK)	11.00	U	ug/kg	UJ	5
IRD0785	RB-17-70	IRD0785-07	04/08/08	Soil	EPA 8260B	Vinyl chloride	290	U	ug/kg	UJ	10
IRD0785	RB-17-80	IRD0785-08	04/08/08	Soil	EPA 8260B	Vinyl chloride	250	U	ug/kg	UJ	10
IRD0785	RB-17-80	IRD0785-08	04/08/08	Soil	EPA 8260B	2-Butanone (MEK)	1000	U	ug/kg	UJ	5
IRD0785	RB-17-90	IRD0785-09	04/08/08	Soil	EPA 8260B	Acetone	31	U	ug/kg	UJ	7
IRD0785	RB-17-90	IRD0785-09	04/08/08	Soil	EPA 8260B	2-Butanone (MEK)	11	U	ug/kg	UJ	5
IRD0785	RB-17-100	IRD0785-10	04/08/08	Soil	EPA 8260B	2-Butanone (MEK)	10	U	ug/kg	UJ	5
IRD0785	RB-17-100	IRD0785-10	04/08/08	Soil	EPA 8260B	Dichlorodifluoromethane	5.1	U	ug/kg	UJ	5
IRD0785	RB-17-110	IRD0785-11	04/08/08	Soil	EPA 8260B	2-Butanone (MEK)	9	U	ug/kg	UJ	5
IRD0785	RB-17-110	IRD0785-11	04/08/08	Soil	EPA 8260B	Dichlorodifluoromethane	4.5	U	ug/kg	UJ	5
IRD0923	RB-15-10	IRD0923-01	04/09/08	Soil	EPA 8260B	Acetone	44	U	ug/kg	UJ	7
IRD0923	RB-15-10	IRD0923-01	04/09/08	Soil	EPA 8260B	2-Butanone (MEK)	9.8	U	ug/kg	UJ	5
IRD0923	RB-15-20	IRD0923-02	04/09/08	Soil	EPA 8260B	2-Butanone (MEK)	9.5	U	ug/kg	UJ	5
IRD0923	RB-15-20	IRD0923-02	04/09/08	Soil	EPA 8260B	Acetone	28	U	ug/kg	UJ	7
IRD0923	RB-15-30	IRD0923-03	04/09/08	Soil	EPA 8260B	2-Butanone (MEK)	1100	U	ug/kg	UJ	5
IRD0923	RB-15-30	IRD0923-03	04/09/08	Soil	EPA 8260B	Vinyl chloride	280	U	ug/kg	UJ	10
IRD0923	RB-15-40	IRD0923-04	04/09/08	Soil	EPA 8260B	Vinyl chloride	400	U	ug/kg	UJ	10
IRD0923	RB-15-40	IRD0923-04	04/09/08	Soil	EPA 8260B	2-Butanone (MEK)	1600	U	ug/kg	UJ	5
IRD0923	RB-15-60	IRD0923-05	04/09/08	Soil	EPA 8260B	Vinyl chloride	230	U	ug/kg	UJ	10
IRD0923	RB-15-60	IRD0923-05	04/09/08	Soil	EPA 8260B	2-Butanone (MEK)	930	U	ug/kg	UJ	5
IRD0923	RB-15-70	IRD0923-06	04/09/08	Soil	EPA 8260B	2-Butanone (MEK)	970	U	ug/kg	UJ	5
IRD0923	RB-15-70	IRD0923-06	04/09/08	Soil	EPA 8260B	Vinyl chloride	240	U	ug/kg	UJ	10
IRD1075	RB-15-82	IRD1075-01	04/10/08	Soil	EPA 8260B	2-Butanone (MEK)	1000	U	ug/kg	UJ	5
IRD1075	RB-15-82	IRD1075-01	04/10/08	Soil	EPA 8260B	Chloromethane	260	U	ug/kg	UJ	5
IRD1075	RB-15-90	IRD1075-02	04/10/08	Soil	EPA 8260B	Chloromethane	320	U	ug/kg	UJ	5
IRD1075	RB-15-90	IRD1075-02	04/10/08	Soil	EPA 8260B	2-Butanone (MEK)	1300	U	ug/kg	UJ	5
IRD1075	RB-15-100	IRD1075-03	04/10/08	Soil	EPA 8260B	2-Butanone (MEK)	7.7	U	ug/kg	UJ	5
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,3-Dichloropropane	1.9	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Isopropylbenzene	1.9	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	2-Hexanone	9.5	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Hexachlorobutadiene	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Ethylbenzene	1.9	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Dichlorodifluoromethane	4.7	U	ug/kg	UJ	5,13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,1-Dichloroethane	1.9	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	trans-1,3-Dichloropropene	1.9	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	cis-1,3-Dichloropropene	1.9	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,2-Dichloropropane	1.9	U	ug/kg	UJ	13

Table IIIA. Overall Qualified Soil Results

SDG	Client Sample ID	Lab Sample ID	Date	Sample Matrix	Method	Analyte	Lab Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	2,2-Dichloropropane	1.9	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,2,3-Trichlorobenzene	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,2-Dichlorobenzene	1.9	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,2-Dichloroethane	1.9	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	cis-1,2-Dichloroethene	1.9	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,1-Dichloroethene	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,4-Dichlorobenzene	1.9	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	trans-1,2-Dichloroethene	1.9	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,3-Dichlorobenzene	1.9	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	p-Isopropyltoluene	1.9	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,1-Dichloropropene	1.9	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,2,3-Trichloropropane	9.5	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Methyl-tert-butyl Ether (MTBE)	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	m,p-Xylenes	1.9	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	o-Xylene	1.9	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Vinyl chloride	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,2,4-Trimethylbenzene	1.9	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Trichlorofluoromethane	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Trichloroethene	1.9	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,1,2-Trichloroethane	1.9	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Tetrachloroethene	1.9	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,2,4-Trichlorobenzene	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Methylene chloride	10	J	ug/kg	J	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Toluene	0.91	J	ug/kg	J	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Dibromomethane	1.9	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,1,2-Tetrachloroethane	1.9	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,1,1,2-Tetrachloroethane	4.7	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Styrene	1.9	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	n-Propylbenzene	1.9	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Naphthalene	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	4-Methyl-2-Pentanone (MIBK)	4.7	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,1,1-Trichloroethane	1.9	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	tert-Butylbenzene	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,3,5-Trimethylbenzene	1.9	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Bromoform	4.7	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Bromomethane	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	2-Butanone (MEK)	9.5	U	ug/kg	UJ	5,13,19

Table IIIA. Overall Qualified Soil Results

SDG	Client Sample ID	Lab Sample ID	Date	Sample Matrix	Method	Analyte	Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Bromo-chloromethane	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	n-Butylbenzene	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	sec-Butylbenzene	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Acetone	130		ug/kg	UJ	7,13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Bromodichloromethane	1.9	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,2-Dibromoethane (EDB)	1.9	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Carbon tetrachloride	4.7	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	4-Chlorotoluene	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Chloroethane	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Chloroform	29		ug/kg	J	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Chloromethane	4.7	U	ug/kg	UJ	5,13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	2-Chlorotoluene	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Chlorobenzene	1.9	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	1,2-Dibromo-3-chloropropane	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Bromobenzene	4.7	U	ug/kg	UJ	13,19
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Dibromo-chloromethane	1.9	U	ug/kg	UJ	13
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8260B	Benzene	0.89	J	ug/kg	J	13,19
IRC1701	RB-10-40	IRC1701-04	03/20/08	Soil	EPA 8270C	2,4-Dinitrophenol	990	U	ug/kg	UJ	5
IRC1701	RB-10-40	IRC1701-04	03/20/08	Soil	EPA 8270C	2,4-Dinitrotoluene	500	U	ug/kg	UJ	5
IRC1701	RB-10-40	IRC1701-04	03/20/08	Soil	EPA 8270C	4-Nitroaniline	1200	U	ug/kg	UJ	5
IRC1701	RB-10-50	IRC1701-05	03/20/08	Soil	EPA 8270C	2,4-Dinitrophenol	660	U	ug/kg	UJ	5
IRC1701	RB-10-50	IRC1701-05	03/20/08	Soil	EPA 8270C	4-Nitroaniline	830	U	ug/kg	UJ	5
IRC1701	RB-10-50	IRC1701-05	03/20/08	Soil	EPA 8270C	2,4-Dinitrotoluene	330	U	ug/kg	UJ	5
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8270C	4-Nitroaniline	830	U	ug/kg	UJ	5
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8270C	2,4-Dinitrophenol	330	U	ug/kg	UJ	5
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8270C	2,4-Dinitrotoluene	660	U	ug/kg	UJ	5
IRC1701	RB-10-90	IRC1701-09	03/20/08	Soil	EPA 8270C	4-Nitroaniline	660	U	ug/kg	UJ	5
IRC1701	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8270C	4-Nitroaniline	830	U	ug/kg	UJ	5
IRC1780	RB-10-120	IRC1780-01	03/21/08	Soil	EPA 8270C	2,4-Dinitrotoluene	330	U	ug/kg	UJ	5
IRC1780	RB-10-130	IRC1780-02	03/21/08	Soil	EPA 8270C	4-Nitroaniline	830	U	ug/kg	UJ	5
IRC1780	RB-10-130	IRC1780-02	03/21/08	Soil	EPA 8270C	2,4-Dinitrotoluene	330	U	ug/kg	UJ	5
IRC1780	RB-10-130	IRC1780-02	03/21/08	Soil	EPA 8270C	2,4-Dinitrophenol	660	U	ug/kg	UJ	5
IRC1780	RB-10-140	IRC1780-03	03/21/08	Soil	EPA 8270C	2,4-Dinitrophenol	660	U	ug/kg	UJ	5
IRC1780	RB-10-140	IRC1780-03	03/21/08	Soil	EPA 8270C	2,4-Dinitrotoluene	330	U	ug/kg	UJ	5
IRC1780	RB-10-140	IRC1780-03	03/21/08	Soil	EPA 8270C	4-Nitroaniline	830	U	ug/kg	UJ	5
IRC1780	RB-10-150	IRC1780-04	03/21/08	Soil	EPA 8270C	2,4-Dinitrophenol	660	U	ug/kg	UJ	5
IRC1780	RB-10-150	IRC1780-04	03/21/08	Soil	EPA 8270C	2,4-Dinitrotoluene	330	U	ug/kg	UJ	5

Table IIIA. Overall Qualified Soil Results

SDG	Client Sample ID	Lab Sample ID	Date	Sample Matrix	Method	Analyte	Lab Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRC1780	RB-10-150	IRC1780-04	03/21/08	Soil	EPA 8270C	4-Nitroaniline	830	U	ug/kg	UJ	5
IRC2145	RB-11-20	IRC2145-02	03/26/08	Soil	EPA 8270C	4-Nitrophenol	830	U	ug/kg	UJ	9
IRC2145	RB-11-20	IRC2145-02	03/26/08	Soil	EPA 8270C	2,6-Dinitrotoluene	330	U	ug/kg	UJ	9
IRC2145	RB-11-20	IRC2145-02	03/26/08	Soil	EPA 8270C	2,4-Dinitrophenol	660	U	ug/kg	UJ	9
IRC2246	RB-11-100	IRC2246-01	03/27/08	Soil	EPA 8270C	2,4-Dinitrophenol	660	U	ug/kg	UJ	9
IRC2246	RB-11-100	IRC2246-01	03/27/08	Soil	EPA 8270C	Benzoic acid	830	U	ug/kg	UJ	9
IRC2246	RB-11-100	IRC2246-01	03/27/08	Soil	EPA 8270C	4,6-Dinitro-2-methylphenol	420	U	ug/kg	UJ	9
IRC2246	RB-11-100	IRC2246-01	03/27/08	Soil	EPA 8270C	2,6-Dinitrotoluene	330	U	ug/kg	UJ	9
IRC2246	RB-11-130	IRC2246-04	03/27/08	Soil	EPA 8270C	3,3-Dichlorobenzidine	830	U	ug/kg	UJ	19
IRC2246	RB-11-130	IRC2246-04	03/27/08	Soil	EPA 8270C	Benzo(a)anthracene	330	U	ug/kg	UJ	19
IRC2246	RB-11-130	IRC2246-04	03/27/08	Soil	EPA 8270C	2,2'-4,4'-Dichlorobenzil	330	U	ug/kg	UJ	19
IRC2246	RB-11-130	IRC2246-04	03/27/08	Soil	EPA 8270C	Indeno(1,2,3-cd)pyrene	330	U	ug/kg	UJ	19
IRC2246	RB-11-130	IRC2246-04	03/27/08	Soil	EPA 8270C	Chrysene	330	U	ug/kg	UJ	19
IRC2246	RB-11-130	IRC2246-04	03/27/08	Soil	EPA 8270C	Dibenz(a,h)anthracene	420	U	ug/kg	UJ	19
IRC2246	RB-11-130	IRC2246-04	03/27/08	Soil	EPA 8270C	Pyrene	330	U	ug/kg	UJ	19
IRC2246	RB-11-130	IRC2246-04	03/27/08	Soil	EPA 8270C	Benzo(a)pyrene	330	U	ug/kg	UJ	19
IRC2246	RB-11-130	IRC2246-04	03/27/08	Soil	EPA 8270C	Benzo(b)fluoranthene	330	U	ug/kg	UJ	19
IRC2246	RB-11-130	IRC2246-04	03/27/08	Soil	EPA 8270C	Benzo(g,h,i)perylene	330	U	ug/kg	UJ	19
IRC2246	RB-11-130	IRC2246-04	03/27/08	Soil	EPA 8270C	Benzo(k)fluoranthene	330	U	ug/kg	UJ	19
IRC2246	RB-11-130	IRC2246-04	03/27/08	Soil	EPA 8270C	Bis(2-ethylhexyl)phthalate	330	U	ug/kg	UJ	19
IRC2246	RB-11-130	IRC2246-04	03/27/08	Soil	EPA 8270C	Butyl benzyl phthalate	330	U	ug/kg	UJ	19
IRC2246	RB-11-130	IRC2246-04	03/27/08	Soil	EPA 8270C	Di-n-octyl phthalate	330	U	ug/kg	UJ	19
IRD0785	RB-17-80	IRD0785-08RE1	04/08/08	Soil	EPA 8270C	n-Hydroxymethylphthalimide	6600	U	ug/kg	UJ	5
IRD0785	RB-17-100	IRD0785-10RE1	04/08/08	Soil	EPA 8270C	n-Hydroxymethylphthalimide	6600	U	ug/kg	UJ	5
IRD0923	RB-15-10	IRD0923-01	04/09/08	Soil	EPA 8270C	Benzoic acid	830	U	ug/kg	UJ	9
IRD0923	RB-15-40	IRD0923-04	04/09/08	Soil	EPA 8270C	n-Hydroxymethylphthalimide	6600	U	ug/kg	UJ	5
IRD0923	RB-15-60	IRD0923-05	04/09/08	Soil	EPA 8270C	n-Hydroxymethylphthalimide	6600	U	ug/kg	UJ	5
IRD0923	RB-15-70	IRD0923-06	04/09/08	Soil	EPA 8270C	n-Hydroxymethylphthalimide	6600	U	ug/kg	UJ	5
IRD1075	RB-15-82	IRD1075-01	04/10/08	Soil	EPA 8270C	n-Hydroxymethylphthalimide	6600	U	ug/kg	UJ	5
IRD1075	RB-15-90	IRD1075-02	04/10/08	Soil	EPA 8270C	n-Hydroxymethylphthalimide	6600	U	ug/kg	UJ	5
IRD1075	RB-15-100	IRD1075-03	04/10/08	Soil	EPA 8270C	n-Hydroxymethylphthalimide	6600	U	ug/kg	UJ	5
IRD1075	RB-15-110	IRD1075-04	04/10/08	Soil	EPA 8270C	n-Hydroxymethylphthalimide	6600	U	ug/kg	UJ	5
IRC2246	RB-11-100	IRC2246-01	03/27/08	Soil	EPA 8081A	4,4'-DDT	11	ug/kg	J-	8	
IRD0785	RB-17-90	IRD0785-09	04/08/08	Soil	EPA 8081A	alpha-BHC	5	U	ug/kg	UJ	5
IRD0785	RB-17-90	IRD0785-09	04/08/08	Soil	EPA 8081A	beta-BHC	5	U	ug/kg	UJ	5
IRD0785	RB-17-90	IRD0785-09	04/08/08	Soil	EPA 8081A	delta-BHC	10	U	ug/kg	UJ	5
IRD0785	RB-17-90	IRD0785-09	04/08/08	Soil	EPA 8081A	gamma-BHC (Lindane)	5	U	ug/kg	UJ	5

Table IIIA. Overall Qualified Soil Results

SDG	Client Sample ID	Lab Sample ID	Sample Date	Matrix	Method	Analyte	Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRD0785	RB-17-100	IRD0785-10	04/08/08	Soil	EPA 8081A	beta-BHC	5	U	ug/kg	UJ	5
IRD0785	RB-17-100	IRD0785-10	04/08/08	Soil	EPA 8081A	delta-BHC	10	U	ug/kg	UJ	5
IRD0785	RB-17-100	IRD0785-10	04/08/08	Soil	EPA 8081A	alpha-BHC	5	U	ug/kg	UJ	5
IRD0785	RB-17-100	IRD0785-10	04/08/08	Soil	EPA 8081A	gamma-BHC (Lindane)	5	U	ug/kg	UJ	5
IRD0785	RB-17-110	IRD0785-11	04/08/08	Soil	EPA 8081A	alpha-BHC	5	U	ug/kg	UJ	5
IRD0785	RB-17-110	IRD0785-11	04/08/08	Soil	EPA 8081A	beta-BHC	5	U	ug/kg	UJ	5
IRD0785	RB-17-110	IRD0785-11	04/08/08	Soil	EPA 8081A	delta-BHC	10	U	ug/kg	UJ	5
IRD0785	RB-17-110	IRD0785-11	04/08/08	Soil	EPA 8081A	gamma-BHC (Lindane)	5	U	ug/kg	UJ	5
IRD0785	RB-17-110	IRD0785-11	04/08/08	Soil	EPA 8081A	beta-BHC	5	U	ug/kg	UJ	5
IRD0923	RB-15-10	IRD0923-01	04/09/08	Soil	EPA 8081A	4,4'-DDT	5	U	ug/kg	UJ	5
IRD0923	RB-15-30	IRD0923-03	04/09/08	Soil	EPA 8081A	4,4'-DDT	5	U	ug/kg	UJ	5
IRD0923	RB-15-40	IRD0923-04	04/09/08	Soil	EPA 8081A	4,4'-DDT	5	U	ug/kg	UJ	5
IRD0923	RB-15-60	IRD0923-05	04/09/08	Soil	EPA 8081A	4,4'-DDT	5	U	ug/kg	UJ	5
IRD0923	RB-15-70	IRD0923-06	04/09/08	Soil	EPA 8081A	4,4'-DDT	5	U	ug/kg	UJ	5
IRD1075	RB-15-82	IRD1075-01	04/10/08	Soil	EPA 8081A	2,4'-DDT	9.4	J	ug/kg	J-	8

Table IIIB. Overall Qualified Water Results

SDG	Client Sample ID	Lab Sample ID	Date	Sample Matrix	Method	Analyte	Lab Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,3-Dichloropropane	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Ethylbenzene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	trans-1,3-Dichloropropene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,1-Dichloropropene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	cis-1,3-Dichloropropene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,2-Dichloropropane	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	2,2-Dichloropropane	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	trans-1,2-Dichloroethene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	cis-1,2-Dichloroethene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,2-Dichloroethane	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,4-Dichlorobenzene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,1,1,2-Tetrachloroethane	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,3-Dichlorobenzene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,2-Dichlorobenzene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Dibromomethane	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,2-Dibromoethane (EDB)	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,2-Dibromo-3-chloropropane	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Dibromochloromethane	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	4-Chlorotoluene	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Dichlorodifluoromethane	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,2,3-Trichlorobenzene	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Dimethyl disulfide	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	m,p-Xylenes	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	o-Xylene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Vinyl chloride	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,3,5-Trimethylbenzene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,2,4-Trimethylbenzene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,2,3-Trichloropropane	10	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Trichlorofluoromethane	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Trichloroethene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,1,2-Trichloroethane	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	n-Propylbenzene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,2,4-Trichlorobenzene	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Hexachlorobutadiene	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Toluene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Tetrachloroethene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,1,2,2-Tetrachloroethane	2	U	ug/l	UJ	2

Table IIIB. Overall Qualified Water Results

SDG	Client Sample ID	Lab Sample ID	Sample Date	Matrix	Method	Analyte	Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,1-Dichloroethane	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Styrene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	2-Chlorotoluene	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Naphthalene	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Methylene chloride	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	p-Isopropyltoluene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Isopropylbenzene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,1,1-Trichloroethane	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Bromodichloromethane	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	1,1-Dichloroethene	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Chloromethane	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Benzene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Bromochloromethane	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Bromoform	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Bromomethane	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	n-Butylbenzene	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	sec-Butylbenzene	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	tert-Butylbenzene	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Carbon tetrachloride	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Chlorobenzene	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Chloroethane	5	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Chloroform	2	U	ug/l	UJ	2
IRE0948	TB-050808	IRE0948-01	05/08/08	Water	EPA 8260B	Bromobenzene	5	U	ug/l	UJ	2
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Butyl benzyl phthalate	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Chrysene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Dibenz(a,h)anthracene	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Dibenzo furan	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Diethyl phthalate	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Dimethyl phthalate	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Di-n-butyl phthalate	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Di-n-octyl phthalate	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Fluoranthene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Fluorene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Hexachlorobenzene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Indeno(1,2,3-cd)pyrene	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Bis(2-ethylhexyl)phthalate	190	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Isophorone	38	U	ug/l	UJ	1

Table IIIB. Overall Qualified Water Results

SDG	Client Sample ID	Lab Sample ID	Sample Date	Sample Matrix	Method	Analyte	Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Naphthalene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Nitrobenzene	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	N-Nitroso-di-n-propylamine	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	N-Nitrosodiphenylamine	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Pentachlorophenol	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Phenanthrene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Phenol	430	U	ug/l	J-	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Pyrene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Hexachlorobutadiene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Hexachlorocyclopentadiene	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	2,4-Dichlorophenol	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	4,6-Dinitro-2-methylphenol	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	3-Nitroaniline	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	1,2-Dichlorobenzene	80	U	ug/l	J-	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	2-Chloronaphthalene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	2-Chlorophenol	110	U	ug/l	J-	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Hexachloroethane	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Bis(2-chloroisopropyl)ether	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	2,4-Dinitrotoluene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	4-Bromophenyl phenyl ether	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	2,4-Dimethylphenol	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	2,4,6-Trichlorophenol	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	2,4,5-Trichlorophenol	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	2,6-Dinitrotoluene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	2-Nitropheno	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	2-Nitroaniline	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	2-Methylphenol	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	2-Methylnaphthalene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	1,4-Dichlorobenzene	110	U	ug/l	J-	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	1,3-Dichlorobenzene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	1,2-Diphenylhydrazine/Azobenzene	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	2,4-Dinitrophenol	77	U	ug/l	UJ	1,5
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Benzog(h,i)perylene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	3,3-Dichlorobenzidine	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	4-Chloro-3-methylphenol	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Bis(2-chloroethyl)ether	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1	05/08/08	Water	EPA 8270C	Bis(2-chloroethoxy)methane	38	U	ug/l	UJ	1

Table IIIB. Overall Qualified Water Results

SDG	Client Sample ID	Sample ID Date	Matrix	Method	Analyte	Lab Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRE0948	MC-MW-15-0508	IRE0948-03RE1 05/08/08	Water	EPA 8270C	Benzyl alcohol	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1 05/08/08	Water	EPA 8270C	Benzo(k)fluoranthene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1 05/08/08	Water	EPA 8270C	Benzo(b)fluoranthene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1 05/08/08	Water	EPA 8270C	Benzo(a)pyrene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1 05/08/08	Water	EPA 8270C	Benzo(a)anthracene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1 05/08/08	Water	EPA 8270C	Benzidine	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1 05/08/08	Water	EPA 8270C	4-Nitrophenol	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1 05/08/08	Water	EPA 8270C	4-Chloroaniline	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1 05/08/08	Water	EPA 8270C	Benzoic acid	120	U	ug/l	J	1,10
IRE0948	MC-MW-15-0508	IRE0948-03RE1 05/08/08	Water	EPA 8270C	Anthracene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1 05/08/08	Water	EPA 8270C	4-Methylphenol	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1 05/08/08	Water	EPA 8270C	4-Nitroaniline	77	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1 05/08/08	Water	EPA 8270C	4-Chlorophenyl phenyl ether	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1 05/08/08	Water	EPA 8270C	Acenaphthene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1 05/08/08	Water	EPA 8270C	1,2,4-Trichlorobenzene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1 05/08/08	Water	EPA 8270C	Acenaphthylene	38	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03RE1 05/08/08	Water	EPA 8270C	Aniline	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1 05/08/08	Water	EPA 8270C	Di-n-octyl phthalate	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1 05/08/08	Water	EPA 8270C	Dibenzofuran	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1 05/08/08	Water	EPA 8270C	Dimethyl phthalate	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1 05/08/08	Water	EPA 8270C	Fluoranthene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1 05/08/08	Water	EPA 8270C	Diethyl phthalate	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1 05/08/08	Water	EPA 8270C	Di-n-butyl phthalate	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1 05/08/08	Water	EPA 8270C	Dibenz(a,h)anthracene	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1 05/08/08	Water	EPA 8270C	Chrysene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1 05/08/08	Water	EPA 8270C	Bis(2-chloroisopropyl)ether	96	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1 05/08/08	Water	EPA 8270C	Butyl benzyl phthalate	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1 05/08/08	Water	EPA 8270C	Hexachlorobenzene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1 05/08/08	Water	EPA 8270C	Hexachlorobutadiene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1 05/08/08	Water	EPA 8270C	Hexachlorocyclopentadiene	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1 05/08/08	Water	EPA 8270C	Hexachloroethane	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1 05/08/08	Water	EPA 8270C	Indeno(1,2,3-cd)pyrene	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1 05/08/08	Water	EPA 8270C	Isophorone	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1 05/08/08	Water	EPA 8270C	Naphthalene	19	U	ug/l	UJ	1

Table IIIB. Overall Qualified Water Results

Client SDG	Sample ID	Lab Sample ID	Sample Date	Matrix	Method	Analyte	Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	Nitrobenzene	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	N-Nitroso-di-n-propylamine	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	N-Nitrosodiphenylamine	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	Phenanthrene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	Pyrene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	Benzyl alcohol	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	Pentachlorophenol	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	2,4-Dimethylphenol	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	3,3-Dichlorobenzidine	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	2-Nitrophenol	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	2-Nitroaniline	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	2-Methylphenol	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	2-Chlorophenol	130		ug/l	J-	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	1,2-Diphenylhydrazine/Azobenzene	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	2,6-Dinitrotoluene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	3-Nitroaniline	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	2,4-Dinitrophenol	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	2-Methylnaphthalene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	2,4-Dichlorophenol	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	Bis(2-chloroethoxy)methane	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	1,2-Dichlorobenzene	99	U	ug/l	J-	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	Bis(2-chloroethyl)ether	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	2,4,6-Trichlorophenol	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	2,4,5-Trichlorophenol	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	1,4-Dichlorobenzene	130		ug/l	J-	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	1,3-Dichlorobenzene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	2,4-Dinitrotoluene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	Anthracene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	Benzo(k)fluoranthene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	Benzo(g,h,i)perylene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	2-Chloronaphthalene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	1,2,4-Trichlorobenzene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	4,6-Dinitro-2-methylphenol	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	Benzo(a)pyrene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	Benzzoic acid	41		ug/l	J	1,10
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	Benzidine	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C	Benzo(b)fluoranthene	19	U	ug/l	UJ	1

Table IIIB. Overall Qualified Water Results

SDG	Client Sample ID	Lab Sample ID Date	Sample Matrix	Method	Analyte	Lab Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C Aniline	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C 4-Chloroaniline	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C Acenaphthene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C 4-Nitrophenol	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C 4-Nitroaniline	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C 4-Bromophenyl phenyl ether	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C 4-Methylphenol	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C 4-Chlorophenyl phenyl ether	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C Acenaphthylene	19	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C 4-Chloro-3-methylphenol	38	U	ug/l	UJ	1
IRE0948	PL-502-0508	IRE0948-04RE1	05/08/08	Water	EPA 8270C Benzo(a)anthracene	19	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Dibenz(a,h)anthracene	190	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Dibenzofuran	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Diethyl phthalate	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Di-n-butyl phthalate	190	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Di-n-octyl phthalate	190	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Dimethyl phthalate	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Chrysene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Butyl benzyl phthalate	190	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Bis(2-ethylhexyl)phthalate	480	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Bis(2-chloroisopropyl)ether	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Bis(2-chloroethyl)ether	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Benzyl alcohol	190	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Pyrene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Bis(2-chloroethoxy)methane	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Isophorone	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C 4-Chloroaniline	95	U	ug/l	J-	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Phenol	160	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Pentachlorophenol	190	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C N-Nitrosodiphenylamine	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C N-Nitroso-di-n-propylamine	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Phenanthrene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Naphthalene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Fluoranthene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Indeno(1,2,3-cd)pyrene	190	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Hexachlorocyclopentadiene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C Hexachlorocyclopentadiene	190	U	ug/l	UJ	1

Table IIIB. Overall Qualified Water Results

SDG	Client Sample ID	Lab Sample ID	Sample Date	Matrix	Method	Analyte	Lab Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	Hexachlorobutadiene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	Hexachlorobenzene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	Fluorene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	Nitrobenzene	190	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	2,4,6-Trichlorophenol	190	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	2-Methylphenol	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	2-Methylphthalene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	2-Chlorophenol	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	2-Chloronaphthalene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	2,6-Dinitrotoluene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	2,4-Dinitrotoluene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	2,4-Dinitrophenol	190	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	2-Nitroaniline	190	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	2,4-Dichlorophenol	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	1,2-Diphenylhydrazine/Azobenzene	190	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	2,4,5-Trichlorophenol	190	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	1,4-Dichlorobenzene	1200	ug/l	J-	J-	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	1,3-Dichlorobenzene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	Benzoic acid	190	U	ug/l	UJ	1.10
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	1,2-Dichlorobenzene	610	ug/l	J-	J-	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	4-Methylphenol	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	1,2,4-Trichlorobenzene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	2,4-Dimethylphenol	190	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	Aniline	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	2-Nitrophenol	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	Benzidine	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	Anthracene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	Benzo(k)fluoranthene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	Acenaphthylene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	Acenaphthene	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	4-Nitrophenol	190	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	4-Nitroaniline	190	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	4-Chlorophenyl phenyl ether	95	U	ug/l	UJ	1
IRE0948	MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	4-Chloro-3-methylphenol	190	U	ug/l	UJ	1

Table IIIB. Overall Qualified Water Results

SDG Client Sample ID	Lab Sample ID	Sample Date	Matrix	Method	Analyte	Lab Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRE0948 MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	4-Bromophenyl phenyl ether	95	U	ug/l	UJ	1
IRE0948 MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	4,6-Dinitro-2-methylphenol	190	U	ug/l	UJ	1
IRE0948 MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	3-Nitroaniline	190	U	ug/l	UJ	1
IRE0948 MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	3,3-Dichlorobenzidine	190	U	ug/l	UJ	1
IRE0948 MC-MW-17-0508	IRE0948-06RE1	05/08/08	Water	EPA 8270C	Benz(a)anthracene	95	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Bis(2-chloroethoxy)methane	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Butyl benzyl phthalate	380	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Bis(2-ethylhexyl)phthalate	950	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Bis(2-chloroisopropyl)ether	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Bis(2-chloroethyl)ether	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Nitrobenzene	380	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Benzyl alcohol	380	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Benzoic acid	380	U	ug/l	UJ	1,10
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Benzo(k)fluoranthene	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Benzo(b)fluoranthene	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	N-Nitroso-di-n-propylamine	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Benzo(a)pyrene	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Benzo(a)anthracene	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Benzidine	380	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Benzo(g,h,i)perylene	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Isophorone	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Dimethyl phthalate	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Diethyl phthalate	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Dibenzofuran	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Dibenz(a)anthracene	380	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Hexachlorobutadiene	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Hexachlorocyclopentadiene	380	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Pyrene	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Pentachlorophenol	380	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Indeno(1,2,3-cd)pyrene	380	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Chrysene	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Naphthalene	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Di-n-butyl phthalate	380	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	4-Chloroaniline	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	N-Nitrosodiphenylamine	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Anthracene	190	U	ug/l	UJ	1
IRE0948 MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Phenanthrene	190	U	ug/l	UJ	1

Table III.B. Overall Qualified Water Results

Client SDG	Sample ID	Lab Sample ID	Date	Matrix	Method	Analyte	Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Hexachlorobenzene	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Hexachloroethane	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	2,4,5-Trichlorophenol	380	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	4-Methylphenol	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	2-Chloronaphthalene	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	2,6-Dinitrotoluene	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	2,4-Dinitrotoluene	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	2,4-Dinitrophenol	380	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	2,4-Dimethylphenol	380	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	2-Methylnaphthalene	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	2,4,6-Trichlorophenol	380	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	2-Methylphenol	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	1,4-Dichlorobenzene	3800		ug/l	J-	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	1,3-Dichlorobenzene	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	1,2-Diphenylhydrazine/Azobenzene	380	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	1,2-Dichlorobenzene	1900		ug/l	J-	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	1,2,4-Trichlorobenzene	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Di-n-octyl phthalate	380	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	2,4-Dichlorophenol	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	4-Chloro-3-methylphenol	380	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Acenaphthylene	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Fluorene	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Acenaphthene	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Fluoranthene	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	4-Nitrophenol	380	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	4-Nitroaniline	380	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	2-Chlorophenol	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	4-Chlorophenyl phenyl ether	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Aniline	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	4-Bromophenyl phenyl ether	190	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	Phenol	320		ug/l	J-	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	4,6-Dinitro-2-methylphenol	380	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	3-Nitroaniline	380	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	3,3-Dichlorobenzidine	380	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	2-Nitroaniline	380	U	ug/l	UJ	1
IRE0948	MC-MW-18-0508	IRE0948-07RE1	05/08/08	Water	EPA 8270C	2-Nitrophenol	190	U	ug/l	UJ	1
IRE0948	MC-MW-15-0508	IRE0948-03	05/08/08	Water	EPA 8081A	Chlordane	0.94	U	ug/l	UJ	5

Table III B. Overall Qualified Water Results

SDG	Client Sample ID	Lab Sample ID	Sample Date	Matrix	Method	Analyte	Result	Lab Qualifier	Lab Units	Validation Qualifier	Reason Code
IRE0948	PL-502-0508	IRE0948-04	05/08/08	Water	EPA 8081A	Chlordane	0.94	U	ug/l	UJ	5
IRE0948	MC-MW-17-0508	IRE0948-06	05/08/08	Water	EPA 8081A	Chlordane	0.94	U	ug/l	UJ	5
IRE0948	MC-MW-18-0508	IRE0948-07	05/08/08	Water	EPA 8081A	Chlordane	0.94	U	ug/l	UJ	5

ATTACHMENT A

VOC Soil Data Validation Report

Volatiles by EPA SW 846 Method 8260B

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodices were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 in these SDGs.

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria with the following exceptions:

SDG	Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
IRC1701 IRC1780	3/7/08	2-Butanone	0.040 (≥ 0.05)	RB-10-90 RB-10-100 RB-10-110 RB-10-120 RB-10-150	UJ (all non-detects)	A

SDG	Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
IRC1701 IRC1780 IRC2145	3/16/08	2-Butanone	0.031 (≥ 0.05)	RB-10-60 RB-10-70 RB-10-130 RB-10-140 RB-11-50 RB-11-60 RB-11-80	UJ (all non-detects)	A
IRC1701	3/17/08	2-Butanone	0.032 (≥ 0.05)	RB-10-10 RB-10-20	UJ (all non-detects)	A
IRC1701	3/23/08	2-Butanone	0.039 (≥ 0.05)	RB-10-30 RB-10-40 RB-10-50 RB-10-80	UJ (all non-detects)	A
IRC2145	2/15/08	2-Butanone	0.044 (≥ 0.05)	RB-11-90	UJ (all non-detects)	A
IRC2145 IRC2246 IRD1075	4/2/08	2-Butanone	0.037 (≥ 0.05)	RB-11-10 RB-11-20 RB-11-30 RB-11-40 RB-11-70 RB-11-100 RB-11-110 RB-11-120 RB-11-130 RB-11-140 RB-15-82 RB-15-90 RB-15-110	UJ (all non-detects)	A
IRD0785 IRD0923	4/3/08	2-Butanone	0.037 (≥ 0.05)	RB-17-10 RB-17-20 RB-17-30 RB-17-40 RB-17-50 RB-17-60 RB-17-70 RB-17-80 RB-17-90 RB-17-100 RB-17-110 RB-15-10 RB-15-20 RB-15-30 RB-15-40 RB-15-60 RB-15-70	J (all detects) UJ (all non-detects)	A
IRD1075	4/12/08	2-Butanone	0.032 (≥ 0.05)	RB-15-100	UJ (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

SDG	Date	Compound	%D	Associated Samples	Flag	A or P
IRC1701	3/24/08 (VSTD025A-gcms56)	Chloromethane Acetone	26.1 35.3	RB-10-10 RB-10-20	UJ (all non-detects) UJ (all non-detects)	A
IRC1701	3/25/08 (VSTD025-gcms9)	trans-1,3-Dichloropropene	26.3	RB-10-30 RB-10-40	NA	-
IRC1701 IRC1780	3/26/08 (VSTD025-gcms1)	Dichlorodifluoromethane	38.6	RB-10-60 RB-10-70 RB-10-130 RB-10-140	UJ (all non-detects)	A
IRC1701 IRC1780	3/27/08 (VSTD025A-gcms53)	Acetone 2-Butanone 4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane	27.8 32.5 27.2 30.7 29.0	RB-10-90 RB-10-120 RB-10-150	UJ (all non-detects) UJ (all non-detects) UJ (all non-detects) UJ (all non-detects) UJ (all non-detects)	A
IRC2145	3/28/08 (VSTD025A-gcms1)	Acetone	26.1	RB-11-50 RB-11-60	UJ (all non-detects)	A
IRC2145	4/3/08 (VSTD025-gcms60)	Trichlorofluoromethane 2,2-Dichloropropene	37.0 27.6	RB-11-90	NA NA	-
IRD0785	4/11/08 (VSTD025)	Dichlorodifluoromethane	30.4	RB-17-10 RB-17-20 RB-17-30 RB-17-100 RB-17-110	UJ (all non-detects)	A
IRD1075	4/16/08	Chloromethane	29.1	RB-15-82 RB-15-90	UJ (all non-detects)	A
IRD1075	4/22/08	Dichlorodifluoromethane Chloromethane	28.2 32.2	RB-15-110	UJ (all non-detects) UJ (all non-detects)	A

Although the above listed %Ds flagged "NA" demonstrate a high bias, the affected compounds in the associated samples were non-detected and did not warrant the qualification of the data.

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

SDG	Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
IRC1701	3/24/08 (VSTD025A-gcms56)	2-Butanone	0.032 (≥ 0.05)	RB-10-10 RB-10-20	UJ (all non-detects)	A
IRC1701	3/25/08 (VSTD025-gcms9)	2-Butanone	0.043 (≥ 0.05)	RB-10-50 RB-10-80	UJ (all non-detects)	A
IRC1701	3/25/08 (VSTD025A-gcms9)	2-Butanone	0.043 (≥ 0.05)	RB-10-30 RB-10-40	UJ (all non-detects)	A
IRC1701	3/25/08 (VSTD025A-gcms53)	2-Butanone	0.030 (≥ 0.05)	RB-10-100 RB-10-110	UJ (all non-detects)	A
IRC1701 IRC1780	3/26/08 (VSTD025-gcms1)	2-Butanone	0.031 (≥ 0.05)	RB-10-60 RB-10-70 RB-10-130 RB-10-140	UJ (all non-detects)	A
IRC1701 IRC1780	3/27/08 (VSTD025A-gcms53)	2-Butanone	0.027 (≥ 0.05)	RB-10-90 RB-10-120 RB-10-150	UJ (all non-detects)	A
IRC2145	3/28/08 (VSTD025A-gcms1)	2-Butanone	0.028 (≥ 0.05)	RB-11-50 RB-11-60	UJ (all non-detects)	A
IRC2145	3/29/08 (VSTD025-gcms1)	2-Butanone	0.030 (≥ 0.05)	RB-11-80	UJ (all non-detects)	A
IRC2145	4/3/08 (VSTD025-gcms60)	2-Butanone	0.037 (≥ 0.05)	RB-11-90	UJ (all non-detects)	A
IRC2246	4/4/08 (VSTD025)	2-Butanone	0.039 (≥ 0.05)	RB-11-110 RB-11-130 RB-11-140	UJ (all non-detects)	A
IRC2145 IRC2246	4/4/08 (VSTD025A)	2-Butanone	0.042 (≥ 0.05)	RB-11-20 RB-11-100 RB-11-120	UJ (all non-detects)	A
IRC2145	4/6/08 (VSTD025-gcms56)	2-Butanone	0.036 (≥ 0.05)	RB-11-30 RB-11-40	UJ (all non-detects)	A
IRC2145	4/7/08 (VSTD025-gcms56)	2-Butanone	0.034 (≥ 0.05)	RB-11-10	UJ (all non-detects)	A
IRC2145	4/8/08 (VSTD025-gcms56)	2-Butanone	0.037 (≥ 0.05)	RB-11-70	UJ (all non-detects)	A

SDG	Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
IRD0785	4/11/08 (VSTD025)	2-Butanone	0.033 (≥ 0.05)	RB-17-10 RB-17-20 RB-17-30 RB-17-100 RB-17-110	J (all detects) UJ (all non-detects)	A
IRD0785 IRD0923	4/11/08 (VSTD025A)	2-Butanone	0.040 (≥ 0.05)	RB-17-40 RB-17-50 RB-17-60 RB-17-70 RB-17-80 RB-17-90 RB-15-10 RB-15-20 RB-15-30 RB-15-40 RB-15-60 RB-15-70	UJ (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

SDG	Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
IRC2145 IRC2246	8D08025-BLK1	4/8/08	Acetone	10.5 ug/L	RB-11-10 RB-11-130 RB-11-140
IRC2145	8D04017-BLK1	4/4/08	Acetone	11.5 ug/L	RB-11-20
IRD0785 IRD0923	8D11022-BLK1	4/11/08	Acetone	11.6 ug/Kg	RB-17-90 RB-15-10 RB-15-20
IRD0785 IRD1075	8D17015-BLK1	4/17/08	Acetone	12.6 ug/Kg	RB-17-10 RB-17-20 RB-17-30 RB-17-100 RB-17-110 RB-15-100
IRD1075	8D22008-BLK1	4/22/08	Acetone	16.2 ug/Kg	RB-15-110

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

SDG	Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
IRC2145	RB-11-10	Acetone	45 ug/Kg	45U ug/Kg
IRC2145	RB-11-20	Acetone	43 ug/Kg	43U ug/Kg
IRC2246	RB-11-130	Acetone	16 ug/Kg	26U ug/Kg
IRC2246	RB-11-140	Acetone	22 ug/Kg	29U ug/Kg
IRD0785	RB-17-10	Acetone	28 ug/Kg	28U ug/Kg
IRD0785	RB-17-20	Acetone	22 ug/Kg	24U ug/Kg
IRD0785	RB-17-30	Acetone	14 ug/Kg	26U ug/Kg
IRD0785	RB-17-90	Acetone	31 ug/Kg	31U ug/Kg
IRD0923	RB-15-10	Acetone	44 ug/Kg	44U ug/Kg
IRD0923	RB-15-20	Acetone	28 ug/Kg	28U ug/Kg
IRD1075	RB-15-110	Acetone	130 ug/Kg	130U ug/Kg

No field blanks were identified in these SDGs.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

SDG	Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
IRC1701	RB-10-30	Dibromofluoromethane	213 (80-125)	All TCL compounds	J+ (all detects)	A
IRC1701	RB-10-40	Dibromofluoromethane	158 (80-125)	All TCL compounds	J+ (all detects)	A
IRC1701	RB-10-90	Dibromofluoromethane Bromofluorobenzene	319 (80-125) 67 (80-120)	All TCL compounds	J (all detects) UJ (all non-detects)	A
IRC1701	RB-10-100	Dibromofluoromethane Bromofluorobenzene	162 (80-125) 78 (80-120)	All TCL compounds	UJ (all non-detects)	A

SDG	Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
IRC1701	RB-10-110	Dibromofluoromethane Bromofluorobenzene	201 (80-125) 74 (80-120)	All TCL compounds	UJ (all non-detects)	A
IRC1780	RB-10-120	Dibromofluoromethane	240 (80-125)	All TCL compounds	NA	-
IRD1075	RB-15-110	Dibromofluoromethane Bromofluorobenzene	587 (80-135) 63 (75-120)	All TCL compounds	J (all detects) UJ (all non-detects)	A

Although the above listed %R flagged "NA" demonstrates a high bias, the affected compounds in the associated sample were non-detected and did not warrant the qualification of the data.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there was insufficient sample volume for analysis of the matrix spike and matrix spike duplicate.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

SDG	LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
IRC1701	8C24028-BS1/BSD1 (RB-10-80)	Vinyl chloride	36 (50-130)	37 (50-130)	-	UJ (all non-detects)	P
IRC1701	8C25002-BS1/BSD1 (RB-10-50)	Isopropylbenzene	127 (75-125)	128 (75-125)	-	NA	-

SDG	LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
IRC1701	8C26027-BS1/BSD1 (RB-10-60 RB-10-70)	Acetone Bromochloromethane Bromodichloromethane Bromoform Bromomethane 2-Butanone Carbon tetrachloride Chloroethane Dibromochloromethane 1,2-Dibromo-3-chloropropane 1,2-Dibromoethane Dibromomethane 1,2-Dichloroethane 1,3-Dichloropropane trans-1,3-Dichloropropene 2-Hexanone 4-Methyl-2-pentanone Naphthalene Styrene 1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane 1,2,3-Trichloropropane Vinyl chloride	- -	- 35 (50-130)	41 (<30) 21 (<20) 26 (<20) 40 (<25) 36 (<30) 42 (<35) 22 (<20) 27 (<25) 34 (<20) 50 (<30) 31 (<20) 29 (<20) 35 (<20) 27 (<20) 24 (<20) 50 (<35) 38 (<35) 38 (<25) 22 (<20) 22 (<20) 25 (<20) 30 (<25) 52 (<25)	J (all detects) UJ (all non-detects)	P
IRC1780	8C26001-BS1/BSD1 (RB-10-130 RB-10-140)	1,1,2,2-Tetrachloroethane	-	143 (55-140)	-	NA	-
IRC2145	8C28026-BS1/BSD1 (RB-11-50 RB-11-60 RB-11-70 RB-11-80 RB-11-90)	Vinyl chloride	27 (50-130)	23 (50-130)	-	UJ (all non-detects)	P
IRC2145	8D04017-BS1/BSD1 (RB-11-20)	2-Hexanone 4-Methyl-2-pentanone	158 (40-150) 149 (40-145)	146 (40-145)	-	NA NA	-
IRC2145	8D07028-BS1/BSD1 (RB-11-10)	2-Butanone 1,2-Dibromo-3-chloropropane 2-Hexanone 4-Methyl-2-pentanone 1,1,2,2-Tetrachloroethane 1,2,3-Trichloropropane Naphthalene	150 (40-145) 144 (45-140) 161 (40-150) 153 (40-145) 141 (55-140) 137 (55-135) -	146 (45-140) 154 (40-150) 148 (40-145) 144 (55-140) 141 (55-135) 143 (50-140)	- - - - - - -	NA NA NA NA NA NA	-
IRC2246	8D02034-BS1/BSD1 (RB-11-100 RB-11-110 RB-11-120)	Hexachlorobutadiene Vinyl chloride Acetone	141 (60-135)	- - -	21 (<20) 60 (<25) 30 (<30)	UJ (all non-detects) UJ (all non-detects) UJ (all non-detects)	P
IRC2246	8D04008-BS1/BSD1 (RB-11-130 RB-11-140)	2-Butanone 1,2-Dibromo-3-chloropropane 2-Hexanone 4-Methyl-2-pentanone Naphthalene 1,1,2,2-Tetrachloroethane 1,2,3-Trichloropropane	157 (40-145) 152 (45-140) 170 (40-150) 164 (40-145) 144 (50-140) 146 (55-140) 142 (55-135)	161 (40-145) 155 (45-140) 173 (40-150) 163 (40-145) 145 (50-140) 144 (55-140) 141 (55-135)	- - - - - - -	NA NA NA NA NA NA NA	-

SDG	LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
IRD0785	8D11009-BS1/BSD1 (RB-17-10 RB-17-20 RB-17-30 RB-17-100 RB-17-110)	2-Hexanone 4-Methyl-2-pentanone Naphthalene 1,2,3-Trichloropropane	166 (40-150) 158 (40-145) 142 (50-140) 138 (55-135)	155 (40-150) 147 (40-145)	- - - -	NA	-
IRD0785	8D11009-BS1/BSD1 (RB-17-20 RB-17-30 RB-17-100 RB-17-110)	2-Butanone	166 (40-145)	-	-	NA	-
IRD0785	8D11009-BS1/BSD1 (RB-17-10)	2-Butanone	166 (40-145)	-	-	J+ (all detects)	P
IRD0785 IRD0923	8D14011-BS1/BSD1 (RB-17-40 RB-17-50 RB-17-60 RB-17-70 RB-17-80 RB-15-30 RB-15-40 RB-15-60 RB-15-70)	Vinyl chloride	-	48 (50-130)	-	UJ (all non-detects)	P
IRD1075	8D17015-BS1/BSD1 (RB-15-100)	Bromoform 2-Butanone 1,2-Dibromo-3-chloropropane 2-Hexanone 4-Methyl-2-pentanone Naphthalene Benzene 1,2,3-Trichloropropane	140 (75-135) 162 (40-145) 147 (45-140) 163 (40-150) 169 (40-145) 154 (50-140) - -	- - - 157 (45-140) 160 (40-150) 167 (40-145) 161 (50-140) 126 (70-125) 140 (55-135)	- - - - - - - -	NA	-
IRD1075	8D22008-BS1/BSD1 (RB-15-110)	Vinyl chloride	136 (50-130)	-	-	NA	-

Although the above listed %Rs flagged "NA" demonstrate a high bias, the affected compounds in the associated samples were non-detected and did not warrant the qualification of the data.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

SDG	Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
IRC1701	RB-10-30	Pentafluorobenzene	307455 (352264-1409054)	Chloromethane Bromomethane Vinyl chloride Chloroethane Methylene chloride Acetone 1,1-Dichloroethene 1,1-Dichloroethane Chloroform 2-Butanone 1,1,1-Trichloroethane Dichlorodifluoromethane Trichlorofluoromethane Methyl-tert-butyl ether 2,2-Dichloropropane Bromoform trans-1,2-Dichloroethene cis-1,2-Dichloroethene	J (all detects) UJ (all non-detects)	A
IRC1701	RB-10-90	Pentafluorobenzene 1,4-Dichlorobenzene-d4	141893 (292435-1169740) 122838 (153094-612374)	Chloromethane Bromomethane Vinyl chloride Chloroethane Methylene chloride Acetone 1,1-Dichloroethene 1,1-Dichloroethane Chloroform 2-Butanone 1,1,1-Trichloroethane Dichlorodifluoromethane Trichlorofluoromethane Methyl-tert-butyl ether 2,2-Dichloropropane Bromoform trans-1,2-Dichloroethene cis-1,2-Dichloroethene 1,1,2,2-Tetrachloroethane 1,2-Dibromo-3-chloropropane Isopropylbenzene Bromobenzene 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 1,3,5-Trimethylbenzene 4-Chlorotoluene tert-Butylbenzene 1,2,4-Trimethylbenzene sec-Butylbenzene 1,3-Dichlorobenzene p-Isopropyltoluene 1,4-Dichlorobenzene n-Butylbenzene 1,2-Dichlorobenzene 1,2,4-Trichlorobenzene Hexachlorobutadiene Naphthalene 1,2,3-Trichlorobenzene	J (all detects) UJ (all non-detects)	A

SDG	Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
IRC1701	RB-10-100	Pentafluorobenzene	259195 (289908-1159632)	Chloromethane Bromomethane Vinyl chloride Chloroethane Methylene chloride Acetone 1,1-Dichloroethene 1,1-Dichloroethane Chloroform 2-Butanone 1,1,1-Trichloroethane Dichlorodifluoromethane Trichlorofluoromethane Methyl-tert-butyl ether 2,2-Dichloropropane Bromochloromethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene	UJ (all non-detects) UJ (all non-detects)	A
IRC1701	RB-10-110	Pentafluorobenzene 1,4-Dichlorobenzene-d4	187684 (289908-1159632) 117525 (154771-619084)	Chloromethane Bromomethane Vinyl chloride Chloroethane Methylene chloride Acetone 1,1-Dichloroethene 1,1-Dichloroethane Chloroform 2-Butanone 1,1,1-Trichloroethane Dichlorodifluoromethane Trichlorofluoromethane Methyl-tert-butyl ether 2,2-Dichloropropane Bromochloromethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene 1,1,2,2-Tetrachloroethane 1,2-Dibromo-3-chloropropane Isopropylbenzene Bromobenzene 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 1,3,5-Trimethylbenzene 4-Chlorotoluene tert-Butylbenzene 1,2,4-Trimethylbenzene sec-Butylbenzene 1,3-Dichlorobenzene p-Isopropyltoluene 1,4-Dichlorobenzene n-Butylbenzene 1,2-Dichlorobenzene 1,2,4-Trichlorobenzene Hexachlorobutadiene Naphthalene 1,2,3-Trichlorobenzene	UJ (all non-detects) UJ (all non-detects)	A

SDG	Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
IRC1780	RB-10-120	Pentafluorobenzene 1,4-Dichlorobenzene-d4	139096 (292435-1169740) 122886 (153094-612374)	Chloromethane Bromomethane Vinyl chloride Chloroethane Methylene chloride Acetone 1,1-Dichloroethene 1,1-Dichloroethane Chloroform 2-Butanone 1,1,1-Trichloroethane Dichlorodifluoromethane Trichlorofluoromethane Methyl-tert-butyl ether 2,2-Dichloropropane Bromo-chloromethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene 1,1,2,2-Tetrachloroethane 1,2-Dibromo-3-chloropropane Isopropylbenzene Bromobenzene 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 1,3,5-Trimethylbenzene 4-Chlorotoluene tert-Butylbenzene 1,2,4-Trimethylbenzene sec-Butylbenzene 1,3-Dichlorobenzene p-Isopropyltoluene 1,4-Dichlorobenzene n-Butylbenzene 1,2-Dichlorobenzene 1,2,4-Trichlorobenzene Hexachlorobutadiene Naphthalene 1,2,3-Trichlorobenzene	UJ (all non-detects) UJ (all non-detects)	A

SDG	Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
IRD1075	RB-15-110	Pentafluorobenzene 1,4-Dichlorobenzene-d4	149068 (583780-2335120) 256449 (442208-1768832)	Chloromethane Bromomethane Vinyl chloride Chloroethane Methylene chloride Acetone 1,1-Dichloroethene 1,1-Dichloroethane Chloroform 2-Butanone 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane Dichlorodifluoromethane Trichlorofluoromethane Methyl-tert-butyl ether 1,2-Dibromo-3-chloropropane 2,2-Dichloropropane Bromochloromethane Isopropylbenzene Bromobenzene 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 1,3,5-Trimethylbenzene 4-Chlorotoluene tert-Butylbenzene 1,2,4-Trimethylbenzene sec-Butylbenzene 1,3-Dichlorobenzene p-Isopropyltoluene 1,4-Dichlorobenzene n-Butylbenzene 1,2-Dichlorobenzene 1,2,4-Trichlorobenzene Hexachlorobutadiene Naphthalene 1,2,3-Trichlorobenzene trans-1,2-Dichloroethene cis-1,2-Dichloroethene	J (all detects) UJ (all non-detects)	A

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIV. System Performance

The system performance was acceptable for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in these SDGs.

DNAPL Step-Out Boring Investigation, Spring 2008
Volatiles - Data Qualification Summary - SDGs IRC1701, IRC1780, IRC2145, IRC2246,
IRD0785, IRD0923, IRD1075

SDG	Sample	Compound	Flag	A or P	Code	Reason
IRC1701 IRC1780 IRC2145 IRC2246 IRD0923 IRD1075	RB-10-10 RB-10-20 RB-10-30 RB-10-40 RB-10-50 RB-10-60 RB-10-70 RB-10-80 RB-10-90 RB-10-100 RB-10-110 RB-10-120 RB-10-130 RB-10-140 RB-10-150 RB-11-10 RB-11-20 RB-11-30 RB-11-40 RB-11-50 RB-11-60 RB-11-70 RB-11-80 RB-11-90 RB-11-100 RB-11-110 RB-11-120 RB-11-130 RB-11-140 RB-15-10 RB-15-20 RB-15-30 RB-15-40 RB-15-60 RB-15-70 RB-15-82 RB-15-90 RB-15-110 RB-15-100	2-Butanone	UJ (all non-detects)	A	5	Initial calibration (RRF)
IRD0785	RB-17-10 RB-17-20 RB-17-30 RB-17-40 RB-17-50 RB-17-60 RB-17-70 RB-17-80 RB-17-90 RB-17-100 RB-17-110	2-Butanone	J (all detects) UJ (all non-detects)	A	5	Initial calibration (RRF)
IRC1701	RB-10-10 RB-10-20	Chloromethane Acetone	UJ (all non-detects) UJ (all non-detects)	A	5	Continuing calibration (%D)

SDG	Sample	Compound	Flag	A or P	Code	Reason
IRC1701 IRC1780	RB-10-90 RB-10-120 RB-10-150	Acetone 2-Butanone 4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane	UJ (all non-detects) UJ (all non-detects) UJ (all non-detects) UJ (all non-detects) UJ (all non-detects)	A	5	Continuing calibration (%D)
IRC1701 IRC1780 IRD0785	RB-10-60 RB-10-70 RB-10-130 RB-10-140 RB-17-10 RB-17-20 RB-17-30 RB-17-100 RB-17-110	Dichlorodifluoromethane	UJ (all non-detects)	A	5	Continuing calibration (%D)
IRC2145	RB-11-50 RB-11-60	Acetone	UJ (all non-detects)	A	5	Continuing calibration (%D)
IRD1075	RB-15-82 RB-15-90	Chloromethane	UJ (all non-detects)	A	5	Continuing calibration (%D)
IRD1075	RB-15-110	Dichlorodifluoromethane Chloromethane	UJ (all non-detects) UJ (all non-detects)	A	5	Continuing calibration (%D)

SDG	Sample	Compound	Flag	A or P	Code	Reason
IRC1701 IRC1780 IRC2145 IRC2246 IRD0923 IRD1075	RB-10-10 RB-10-20 RB-10-30 RB-10-40 RB-10-50 RB-10-60 RB-10-70 RB-10-80 RB-10-90 RB-10-100 RB-10-110 RB-10-120 RB-10-130 RB-10-140 RB-10-150 RB-11-10 RB-11-20 RB-11-30 RB-11-40 RB-11-50 RB-11-60 RB-11-70 RB-11-80 RB-11-90 RB-11-100 RB-11-110 RB-11-120 RB-11-130 RB-11-140 RB-15-10 RB-15-20 RB-15-30 RB-15-40 RB-15-60 RB-15-70 RB-15-82 RB-15-90 RB-15-110 RB-15-100	2-Butanone	UJ (all non-detects)	A	5	Continuing calibration (RRF)
IRD0785	RB-17-10 RB-17-20 RB-17-30 RB-17-40 RB-17-50 RB-17-60 RB-17-70 RB-17-80 RB-17-90 RB-17-100 RB-17-110	2-Butanone	J (all detects) UJ (all non-detects)	A	5	Continuing calibration (RRF)
IRC1701	RB-10-30 RB-10-40	All TCL compounds	J+ (all detects)	A	13	Surrogate spikes (%R)
IRC1701 IRD1075	RB-10-90 RB-15-110	All TCL compounds	J (all detects) UJ (all non-detects)	A	13	Surrogate spikes (%R)
IRC1701	RB-10-100 RB-10-110	All TCL compounds	UJ (all non-detects)	A	13	Surrogate spikes (%R)

SDG	Sample	Compound	Flag	A or P	Code	Reason
IRC1701	RB-10-60 RB-10-70	Acetone Bromochloromethane Bromodichloromethane Bromoform Bromomethane 2-Butanone Carbon tetrachloride Chloroethane Dibromochloromethane 1,2-Dibromo-3-chloropropane 1,2-Dibromoethane Dibromomethane 1,2-Dichloroethane 1,3-Dichloropropene trans-1,3-Dichloropropene 2-Hexanone 4-Methyl-2-pentanone Naphthalene Styrene 1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane 1,2,3-Trichloropropane Vinyl chloride	J (all detects) UJ (all non-detects)	P	10	Laboratory control samples (%R)(RPD)
IRC1701 IRC2145 IRD0785 IRD0923	RB-10-80 RB-11-50 RB-11-60 RB-11-70 RB-11-80 RB-11-90 RB-17-40 RB-17-50 RB-17-60 RB-17-70 RB-17-80 RB-15-30 RB-15-40 RB-15-60 RB-15-70	Vinyl chloride	UJ (all non-detects)	P	10	Laboratory control samples (%R)
IRC2246	RB-11-100 RB-11-110 RB-11-120	Hexachlorobutadiene Vinyl chloride Acetone	UJ (all non-detects) UJ (all non-detects) UJ (all non-detects)	P	10	Laboratory control samples (RPD)
IRD0785	RB-17-10	2-Butanone	J+ (all detects)	P	10	Laboratory control samples (%R)

SDG	Sample	Compound	Flag	A or P	Code	Reason
IRC1701	RB-10-30	Chloromethane Bromomethane Vinyl chloride Chloroethane Methylene chloride Acetone 1,1-Dichloroethene 1,1-Dichloroethane Chloroform 2-Butanone 1,1,1-Trichloroethane Dichlorodifluoromethane Trichlorofluoromethane Methyl-tert-butyl ether 2,2-Dichloropropane Bromochloromethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene	J (all detects) UJ (all non-detects)	A	19	Internal standards (area)
IRC1701 IRD1075	RB-10-90 RB-15-110	Chloromethane Bromomethane Vinyl chloride Chloroethane Methylene chloride Acetone 1,1-Dichloroethene 1,1-Dichloroethane Chloroform 2-Butanone 1,1,1-Trichloroethane Dichlorodifluoromethane Trichlorofluoromethane Methyl-tert-butyl ether 2,2-Dichloropropane Bromochloromethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene 1,1,2,2-Tetrachloroethane 1,2-Dibromo-3-chloropropane Isopropylbenzene Bromobenzene 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 1,3,5-Trimethylbenzene 4-Chlorotoluene tert-Butylbenzene 1,2,4-Trimethylbenzene sec-Butylbenzene 1,3-Dichlorobenzene p-Isopropyltoluene 1,4-Dichlorobenzene n-Butylbenzene 1,2-Dichlorobenzene 1,2,4-Trichlorobenzene Hexachlorobutadiene Naphthalene 1,2,3-Trichlorobenzene	J (all detects) UJ (all non-detects)	A	19	Internal standards (area)

SDG	Sample	Compound	Flag	A or P	Code	Reason
IRC1701	RB-10-100	Chloromethane Bromomethane Vinyl chloride Chloroethane Methylene chloride Acetone 1,1-Dichloroethene 1,1-Dichloroethane Chloroform 2-Butanone 1,1,1-Trichloroethane Dichlorodifluoromethane Trichlorofluoromethane Methyl-tert-butyl ether 2,2-Dichloropropane Bromochloromethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene	UJ (all non-detects) UJ (all non-detects)	A	19	Internal standards (area)
IRC1701 IRC1780	RB-10-110 RB-10-120	Chloromethane Bromomethane Vinyl chloride Chloroethane Methylene chloride Acetone 1,1-Dichloroethene 1,1-Dichloroethane Chloroform 2-Butanone 1,1,1-Trichloroethane Dichlorodifluoromethane Trichlorofluoromethane Methyl-tert-butyl ether 2,2-Dichloropropane Bromochloromethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene 1,1,2,2-Tetrachloroethane 1,2-Dibromo-3-chloropropane Isopropylbenzene Bromobenzene 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 1,3,5-Trimethylbenzene 4-Chlorotoluene tert-Butylbenzene 1,2,4-Trimethylbenzene sec-Butylbenzene 1,3-Dichlorobenzene p-Isopropyltoluene 1,4-Dichlorobenzene n-Butylbenzene 1,2-Dichlorobenzene 1,2,4-Trichlorobenzene Hexachlorobutadiene Naphthalene 1,2,3-Trichlorobenzene	UJ (all non-detects) UJ (all non-detects)	A	19	Internal standards (area)

DNAPL Step-Out Boring Investigation, Spring 2008
Volatiles - Laboratory Blank Data Qualification Summary - SDGs IRC1701, IRC1780,
IRC2145, IRC2246, IRD0785, IRD0923, IRD1075

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
IRC2145	RB-11-10	Acetone	45U ug/Kg	A	7
IRC2145	RB-11-20	Acetone	43U ug/Kg	A	7
IRC2246	RB-11-130	Acetone	26U ug/Kg	A	7
IRC2246	RB-11-140	Acetone	29U ug/Kg	A	7
IRD0785	RB-17-10	Acetone	28U ug/Kg	A	7
IRD0785	RB-17-20	Acetone	24U ug/Kg	A	7
IRD0785	RB-17-30	Acetone	26U ug/Kg	A	7
IRD0785	RB-17-90	Acetone	31U ug/Kg	A	7
IRD0923	RB-15-10	Acetone	44U ug/Kg	A	7
IRD0923	RB-15-20	Acetone	28U ug/Kg	A	7
IRD1075	RB-15-110	Acetone	130U ug/Kg	A	7

DNAPL Step-Out Boring Investigation, Spring 2008
Volatiles - Field Blank Data Qualification Summary - SDGs IRC1701, IRC1780,
IRC2145, IRC2246, IRD0785, IRD0923, IRD1075

No Sample Data Qualified in these SDGs

ATTACHMENT B

VOC Water Data Validation Report

Volatiles by EPA SW 846 Method 8260B

I. Technical Holding Times

All technical holding time requirements were met.

All samples were received in good condition with the following exceptions:

SDG	Sample	Compound	Finding	Criteria	Flag	A or P
IRE0948	TB-050808	All TCL compounds	A headspace was apparent in the sample containers.	There should be no headspace in the sample containers.	UJ (all non-detects)	A

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 in these SDGs.

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample TB-050808 was identified as a trip blank. No volatile contaminants were found in this blank.

Samples PL-501-0508 and PL-504-0508 were identified as equipment rinsates. No volatile contaminants were found in these blanks with the following exceptions:

SDG	Equipment Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
IRE0948	PL-504-0508	5/8/08	Chlorobenzene Benzene Chloroform 1,2-Dichlorobenzene 1,4-Dichlorobenzene	210 ug/L 9.0 ug/L 4.5 ug/L 15 ug/L 30 ug/L	MC-MW-15-0508 PL-502-0508 MC-MW-17-0508** MC-MW-18-0508

Sample PL-503-0508 was identified as a field blank. No volatile contaminants were found in this blank.

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

SDG	Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
IRE0948	MC-MW-17-0508MS/MSD (MC-MW-17-0508**)	1,3-Dichlorobenzene	-	126 (70-125)	-	NA	-

Although the above listed %R flagged "NA" demonstrates a high bias, the affected compound in the associated sample was non-detected and did not warrant the qualification of the data.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits. with the following exceptions:

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIV. System Performance

The system performance was acceptable for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report if data has been qualified.

XVI. Field Duplicates

Samples MC-MW-15-0508 and PL-502-0508 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

SDG	Compound	Concentration (ug/L)		RPD
		MC-MW-15-0508	PL-502-0508	
IRE0948	1,2-Dichlorobenzene	150	170	12
IRE0948	1,4-Dichlorobenzene	210	220	5
IRE0948	1,1-Dichloroethane	620	630	2
IRE0948	1,2-Dichloroethane	380	400	5
IRE0948	Methylene chloride	2600	2600	0
IRE0948	1,1,1-Trichloroethane	76	74	3
IRE0948	Benzene	18000	21000	15
IRE0948	Chlorobenzene	9700	12000	21
IRE0948	Chloroform	42000	53000	23

**DNAPL Step-Out Groundwater Investigation, Spring 2008
Volatiles - Data Qualification Summary - SDG IRE0948**

SDG	Sample	Compound	Flag	A or P	Code	Reason
IRE0948	TB-050808	All TCL compounds	UJ (all non-detects)	A	2	Sample condition (headspace)

**DNAPL Step-Out Groundwater Investigation, Spring 2008
Volatiles - Laboratory Blank Data Qualification Summary - SDG IRE0948**

No Sample Data Qualified in these SDGs

**DNAPL Step-Out Groundwater Investigation, Spring 2008
Volatiles - Field Blank Data Qualification Summary - SDG IRE0948**

No Sample Data Qualified in these SDGs

ATTACHMENT C

SVOC Soil Data Validation Report

Semivolatiles by EPA SW 846 Method 8270C

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodices were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all semivolatile target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

SDG	Date	Compound	%D	Associated Samples	Flag	A or P
IRC1701 IRC1780	3/24/08	2,4-Dinitrophenol 2,4-Dinitrotoluene 4-Nitroaniline	26.7 26.8 26.5	RB-10-40 RB-10-50 RB-10-90 RB-10-120 RB-10-130 RB-10-140 RB-10-150	UJ (all non-detects) UJ (all non-detects) UJ (all non-detects)	A
IRC1701 IRC1780	3/24/08	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	26.9 28.7	RB-10-40 RB-10-50 RB-10-90 RB-10-120 RB-10-130 RB-10-140 RB-10-150	NA	-
IRD0785 IRD0923	4/11/08	n-Hydroxymethylphthalamide	41.9	RB-17-10 RB-17-20 RB-17-30 RB-17-40 RB-17-50 RB-17-60 RB-17-70 RB-17-90 RB-17-110 RB-15-10 RB-15-20 RB-15-30	NA	-
IRD0785 IRD0923	4/14/08	n-Hydroxymethylphthalamide	68.4	RB-17-80 RB-17-100 RB-15-40 RB-15-60 RB-15-70	UJ (all non-detects)	A
IRD1075	4/5/08	n-Hydroxymethylphthalimide	64.4	RB-15-82 RB-15-100	UJ (all non-detects)	A
IRD1075	4/16/08	n-Hydroxymethylphthalimide	32.5	RB-15-90 RB-15-110	UJ (all non-detects)	A

Although the above listed %Ds flagged "NA" demonstrate a high bias, the affected compounds in the associated samples were non-detected and did not warrant the qualification of the data.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds as applicable with the following exceptions:

SDG	Date	Compound	%D	Associated Samples	Flag	A or P
IRC1701 IRD0785 IRD0923 IRD1075	3/14/08	Hexachlorocyclopentadiene	29.0	RB-10-10 RB-10-20 RB-10-30 RB-10-60 RB-10-70 RB-10-80 RB-10-100 RB-10-110 RB-17-10 RB-17-20 RB-17-30 RB-17-40 RB-17-50 RB-17-60 RB-17-70 RB-17-80 RB-17-90 RB-17-100 RB-17-110 RB-15-10 RB-15-20 RB-15-30 RB-15-40 RB-15-60 RB-15-70 RB-15-82 RB-15-90 RB-15-100 RB-15-110	NA	-

Although the above listed %D flagged "NA" demonstrates a high bias, the affected compound in the associated samples was non-detected and did not warrant the qualification of the data.

All of the continuing calibration RRF values were greater than or equal to 0.05 with the following exceptions:

SDG	Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
IRD0785 IRD0923	4/14/08	n-Hydroxymethylphthalimide	0.037 (≥ 0.05)	RB-17-80 RB-17-100 RB-15-40 RB-15-60 RB-15-70	UJ (all non-detects)	A
IRD1075	4/5/08	n-Hydroxymethylphthalimide	0.037 (≥ 0.05)	RB-15-82 RB-15-100	UJ (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

No field blanks were identified in these SDGs.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

SDG	Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
IRC1780	RB-10-150MS/MSD (RB-10-150)	Bis(2-ethylhexyl)phthalate	121 (50-120)	-	-	NA	-
IRC2145	RB-11-20MS/MSD (RB-11-20)	2,4-Dinitrophenol 2,6-Dinitrotoluene 4-Nitrophenol	-	-	36 (\leq 25) 21 (\leq 20) 47 (\leq 30)	UJ (all non-detects) UJ (all non-detects) UJ (all non-detects)	A
IRC2246	RB-11-100MS/MSD (RB-11-100)	2,4-Dinitrophenol 2,6-Dinitrotoluene 4,6-Dinitro-2-methylphenol Benzocic acid	-	-	47 (\leq 25) 24 (\leq 20) 38 (\leq 25) 37 (\leq 30)	UJ (all non-detects) UJ (all non-detects) UJ (all non-detects) UJ (all non-detects)	A
IRD0923	RB-15-10MS/MSD (RB-15-10)	Benzocic acid	-	-	40 (\leq 30)	UJ (all non-detects)	A

Although the above listed %R flagged "NA" demonstrates a high bias, the affected compound in the associated samples was non-detected and did not warrant the qualification of the data.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

SDG	LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
IRC1701 IRC1780	8C24047-BS1	Bis(2-ethylhexyl)phthalate	122 (55-120)	RB-10-10 RB-10-20 RB-10-30 RB-10-40 RB-10-50 RB-10-60 RB-10-70 RB-10-80 RB-10-90 RB-10-100 RB-10-110 RB-10-120 RB-10-130 RB-10-140 RB-10-150	NA	-

Although the above listed %R flagged "NA" demonstrates a high bias, the affected compound in the associated samples was non-detected and did not warrant the qualification of the data.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

SDG	Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
IRC2246	RB-11-130	Chrysene-d12 Perylene-d12	752426 (765060-3060240) 757281 (762830-3051320)	Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)anthracene Chrysene Bis(2-ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene 2,2'/4,4'-Dichlorobenzil	UJ (all non-detects) UJ (all non-detects)	P

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria for samples on which a Level IV review was performed in SDG IRC2145. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIV. System Performance

The system performance was acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in these SDGs.

DNAPL Step-Out Boring Investigation, Spring 2008
Semivolatiles - Data Qualification Summary - SDGs SDGs IRC1701, IRC1780,
IRC2145, IRC2246, IRD0785, IRD0923, IRD1075

SDG	Sample	Compound	Flag	A or P	Code	Reason
IRC1701 IRC1780	RB-10-40 RB-10-50 RB-10-90 RB-10-120 RB-10-130 RB-10-140 RB-10-150	2,4-Dinitrophenol 2,4-Dinitrotoluene 4-Nitroaniline	UJ (all non-detects) UJ (all non-detects) UJ (all non-detects)	A	5	Continuing calibration (%D)
IRD0785 IRD0923 IRD1075	RB-17-80 RB-17-100 RB-15-40 RB-15-60 RB-15-70 RB-15-82 RB-15-100 RB-15-90 RB-15-110	n-Hydroxymethylphthalamide	UJ (all non-detects)	A	5	Continuing calibration (%D)
IRD0785 IRD0923 IRD1075	RB-17-80 RB-17-100 RB-15-40 RB-15-60 RB-15-70 RB-15-82 RB-15-100	n-Hydroxymethylphthalamide	UJ (all non-detects)	A	5	Continuing calibration (RRF)
IRC2145	RB-11-20	2,4-Dinitrophenol 2,6-Dinitrotoluene 4-Nitrophenol	UJ (all non-detects) UJ (all non-detects) UJ (all non-detects)	A	9	Matrix spike/Matrix spike duplicates (RPD)
IRC2246	RB-11-100	2,4-Dinitrophenol 2,6-Dinitrotoluene 4,6-Dinitro-2-methylphenol Benzoic acid	UJ (all non-detects) UJ (all non-detects) UJ (all non-detects) UJ (all non-detects)	A	9	Matrix spike/Matrix spike duplicates (RPD)
IRD0923	RB-15-10	Benzoic acid	UJ (all non-detects)	A	9	Matrix spike/Matrix spike duplicates (RPD)
IRC2246	RB-11-130	Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)anthracene Chrysene Bis(2-ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene 2,2'/4,4'-Dichlorobenzil	UJ (all non-detects) UJ (all non-detects)	P	19	Internal standards (area)

DNAPL Step-Out Boring Investigation, Spring 2008
Semivolatiles - Laboratory Blank Data Qualification Summary - SDGs **IRC1701,**
IRC1780, IRC2145, IRC2246, IRD0785, IRD0923, IRD1075

No Sample Data Qualified in these SDGs

DNAPL Step-Out Boring Investigation, Spring 2008
Semivolatiles - Field Blank Data Qualification Summary - SDGs **SDGs** **IRC1701,**
IRC1780, IRC2145, IRC2246, IRD0785, IRD0923, IRD1075

No Sample Data Qualified in these SDGs

ATTACHMENT D

SVOC Water Data Validation Report

Semivolatiles by EPA SW 846 Method 8270C

I. Technical Holding Times

All technical holding time requirements were met with the following exceptions:

SDG	Sample	Compound	Total Days From Sample Collection Until Extraction	Required Holding Time (in Days) From Sample Collection Until Extraction	Flag	A or P
IRE0948	MC-MW-15-0508 PL-502-0508 MC-MW-17-0508 MC-MW-18-0508	All TCL compounds	8	7	J- (all detects) UJ (all non-detects)	P

The chain-of-custodices were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990.

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all semivolatile target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

SDG	Date	Compound	%D	Associated Samples	Flag	A or P
IRE0948	5/21/08	2,4-Dinitrophenol	26.6	MC-MW-15-0508	UJ (all non-detects)	A
IRE0948	5/21/08	Pyrene	28.0	MC-MW-15-0508	NA	A

Although the above listed %D flagged "NA" demonstrates a high bias, the affected compound in the associated sample was non-detected and did not warrant the qualification of the data.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration RRF values were greater than or equal to 0.05.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

No field blanks were identified in these SDGs.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there was insufficient sample volume for analysis of the matrix spike and matrix spike duplicate.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

SDG	LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
IRE0948	8E16047-BS1/BSD1 (MC-MW-15-0508 PL-502-0508 MC-MW-17-0508 MC-MW-18-0508)	Benzoic acid	-	-	38 (<35)	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIV. System Performance

The system performance was acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples MC-MW-15-0508 and PL-502-0508 were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

SDG	Compound	Concentration (ug/L)		RPD
		MC-MW-15-0508	PL-502-0508	
IRE0948	1,2-Dichlorobenzene	80	99	21
IRE0948	1,4-Dichlorobenzene	110	130	17
IRE0948	2-Chlorophenol	110	130	17
IRE0948	Benzoic acid	120	41	98
IRE0948	Phenol	430	420	2

DNAPL Step-Out Groundwater Investigation, Spring 2008
Semivolatiles - Data Qualification Summary - SDG IRE0948

SDG	Sample	Compound	Flag	A or P	Code	Reason
IRE0948	MC-MW-15-0508 PL-502-0508 MC-MW-17-0508 MC-MW-18-0508	All TCL compounds	J- (all detects) UJ (all non-detects)	P	1	Technical holding times
IRE0948	MC-MW-15-0508	2,4-Dinitrophenol	UJ (all non-detects)	A	5	Continuing calibration (%D)
IRE0948	MC-MW-15-0508 PL-502-0508 MC-MW-17-0508 MC-MW-18-0508	Benzoic acid	J (all detects) UJ (all non-detects)	P	10	Laboratory control samples (RPD)

DNAPL Step-Out Groundwater Investigation, Spring 2008
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG IRE0948

No Sample Data Qualified in these SDGs

DNAPL Step-Out Groundwater Investigation, Spring 2008
Semivolatiles - Field Blank Data Qualification Summary - SDG IRE0948
No Sample Data Qualified in these SDGs

ATTACHMENT E

Pesticides Soil Data Validation Report

Chlorinated Pesticides by EPA SW 846 Method 8081A

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodices were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of single and multicomponent compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for selected compounds.

A curve fit, based on the initial calibration, was established for quantitation for selected compounds. The coefficient of determination (r^2) was greater than or equal to 0.990.

Retention time windows were evaluated and considered technically acceptable for samples on which a Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 15.0% QC limits with the following exceptions:

SDG	Date (Standard)	Column	Compound	%D	Associated Samples	Flag	A or P
IRC1701 IRC1780	3/25/08 (CCV)	B	Endosulfan I	16.7	RB-10-70 RB-10-80 RB-10-90 RB-10-100 RB-10-110 RB-10-120 RB-10-130 RB-10-140 RB-10-150	NA	-
IRD0785	4/11/08 (D10A021)	A	alpha-BHC gamma-BHC beta-BHC delta-BHC	24.9 29.2 36.5 29.7	RB-17-90 RB-17-100 RB-17-110	UJ (all non-detects) UJ (all non-detects) UJ (all non-detects) UJ (all non-detects)	A
IRD0785	4/11/08 (D10A021)	B	alpha-BHC gamma-BHC beta-BHC	17.4 30.1 36.5	RB-17-90 RB-17-100 RB-17-110	UJ (all non-detects) UJ (all non-detects) UJ (all non-detects)	A
IRD0785	4/11/08 (D10A022)	A	delta-BHC	21.0	RB-17-90 RB-17-100 RB-17-110	NA	-
IRD0923	4/11/08 (D10A037)	A	delta-BHC	17.4	RB-15-10 RB-15-30 RB-15-40 RB-15-60 RB-15-70 RB-15-10MS RB-15-10MSD 8D11057-Blk1	NA	-
IRD0923	4/11/08 (D10A037)	A	4,4'-DDT	19.4	RB-15-10 RB-15-30 RB-15-40 RB-15-60 RB-15-70 RB-15-10MS RB-15-10MSD 8D11057-Blk1	UJ (all non-detects)	A
IRD0923	4/11/08 (D10A037)	B	Endrin aldehyde	17.4	RB-15-10 RB-15-30 RB-15-40 RB-15-60 RB-15-70 RB-15-10MS RB-15-10MSD 8D11057-Blk1	NA	-

SDG	Date (Standard)	Column	Compound	%D	Associated Samples	Flag	A or P
IRD0923	4/15/08 (D14A022)	A	alpha-BHC gamma-BHC beta-BHC delta-BHC Heptachlor Heptachlor epoxide 4,4'-DDE Endrin Endosulfan II Endrin aldehyde Methoxychlor	20.1 17.6 19.1 30.5 16.3 21.4 17.4 16.2 18.0 21.0 17.3	RB-15-20	NA	-
IRD0923	4/5/08 (D14A022)	B	beta-BHC Heptachlor Heptachlor epoxide gamma-Chlordane 2,4'-DDE alpha-Chlordane Endosulfan I Dieldrin 2,4-DDD Endrin 2,4'-DDT 4,4'-DDD Endrin aldehyde Endosulfan sulfate Methoxychlor Endrin ketone	23.7 16.1 22.4 15.4 21.2 15.1 25.6 20.4 20.9 21.5 18.4 16.5 27.9 23.5 19.8 18.4	RB-15-20	NA	-

Although the above listed %Ds flagged "NA" demonstrate a high bias, the affected compounds in the associated samples were non-detected and did not warrant the qualification of the data.

The percent differences (%D) of the second source calibration standard were less than or equal to 15.0% for all compounds as applicable.

Retention times (RT) of all compounds in the calibration standards were within QC limits for samples on which a Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

The individual 4,4'-DDT and Endrin breakdowns were less than 15.0% .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks.

No field blanks were identified in these SDGs.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

SDG	Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
IRC2246	RB-11-100MS/MSD (RB-11-100)	4,4'-DDT	40 (45-120)	-	-	J- (all detects)	A
IRD1075	RB-15-82MS/MSD (RB-15-82)	2,4'-DDT	43 (65-115)	55 (65-115)	-	J- (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in these SDGs.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in these SDGs.

XI. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in these SDGs.

DNAPL Step-Out Boring Investigation, Spring 2008
**Chlorinated Pesticides - Data Qualification Summary - SDGs SDGs IRC1701,
 IRC1780, IRC2145, IRC2246, IRD0785, IRD0923, IRD1075**

SDG	Sample	Compound	Flag	A or P	Code	Reason
IRD0785	RB-17-90 RB-17-100 RB-17-110	alpha-BHC gamma-BHC beta-BHC delta-BHC	UJ (all non-detects) UJ (all non-detects) UJ (all non-detects) UJ (all non-detects)	A	5	Continuing calibration (%D)
IRD0923	RB-15-10 RB-15-30 RB-15-40 RB-15-60 RB-15-70	4,4'-DDT	UJ (all non-detects)	A	5	Continuing calibration (%D)
IRC2246	RB-11-100	4,4'-DDT	J- (all detects)	A	8	Matrix spike/Matrix spike duplicates (%R)
IRD1075	RB-15-82	2,4'-DDT	J- (all detects)	A	8	Matrix spike/Matrix spike duplicates (%R)

DNAPL Step-Out Boring Investigation, Spring 2008
**Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDGs SDGs
 IRC1701, IRC1780, IRC2145, IRC2246, IRD0785, IRD0923, IRD1075**

No Sample Data Qualified in these SDGs

DNAPL Step-Out Boring Investigation, Spring 2008
**Chlorinated Pesticides - Field Blank Data Qualification Summary - SDGs SDGs
 IRC1701, IRC1780, IRC2145, IRC2246, IRD0785, IRD0923, IRD1075**

No Sample Data Qualified in these SDGs

ATTACHMENT F

Pesticides Water Data Validation Report

Chlorinated Pesticides by EPA SW 846 Method 8081A

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodices were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of single and multicomponent compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for selected compounds.

A curve fit, based on the initial calibration, was established for quantitation for selected compounds. The coefficient of determination (r^2) was greater than or equal to 0.990.

Retention time windows were evaluated and considered technically acceptable for samples on which a Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 15.0% QC limits with the following exceptions:

SDG	Date (Standard)	Column	Compound	%D	Associated Samples	Flag	A or P
IRE0948	5/14/08 (E14B006)	B	Chiordane	26.5	MC-MW-15-0508 PL-502-0508 MC-MW-17-0508 MC-MW-18-0508	UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 15.0% for all compounds as applicable.

Retention times (RT) of all compounds in the calibration standards were within QC limits for samples on which a Level IV review was performed. Raw data were not evaluated for the samples on which a Level III review was performed.

The individual 4,4'-DDT and Endrin breakdowns were less than 15.0% .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks.

No field blanks were identified in these SDGs.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in these SDGs.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in these SDGs.

XI. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples MC-MW-15-0508 and PL-502-0508 were identified as field duplicates. No chlorinated pesticides were detected in any of the samples with the following exceptions:

SDG	Compound	Concentration (ug/L)		RPD
		MC-MW-15-0508	PL-502-0508	
IRE0948	alpha-BHC	0.44	0.54	20
IRE0948	gamma-BHC	0.23	0.29	23

DNAPL Step-Out Groundwater Investigation, Spring 2008
Chlorinated Pesticides - Data Qualification Summary - SDG IRE0948

SDG	Sample	Compound	Flag	A or P	Code	Reason
IRE0948	MC-MW-15-0508 PL-502-0508 MC-MW-17-0508 MC-MW-18-0508	Chlordane	UJ (all non-detects)	A	5	Continuing calibration (%D)

DNAPL Step-Out Groundwater Investigation, Spring 2008
Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG IRE0948

No Sample Data Qualified in these SDGs

DNAPL Step-Out Groundwater Investigation, Spring 2008
Chlorinated Pesticides - Field Blank Data Qualification Summary - SDG IRE0948

No Sample Data Qualified in these SDGs

ATTACHMENT G

Organic Acids Data Validation Report

Organic Acids by HPLC Method

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodices were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

b. Calibration Verification

Calibration verification was performed at the required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were less than or equal to 20.0% .

The percent difference (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No organic acid contaminants were found in the method blanks.

No field blanks were identified in this SDG.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were not required by the method.

b. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

VI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

VII. System Performance

The system performance was acceptable for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

VIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

Samples MC-MW-15-0508 and PL-502-0508 were identified as field duplicates. No organic acids were detected in any of the samples with the following exceptions:

SDG	Compound	Concentration (mg/L)		RPD
		MC-MW-15-0508	PL-502-0508	
IRE0948	4-Chlorobenzenesulfonic acid	5.6	5.7	2
IRE0948	Dimethyl phosphorodithioic acid	0.27	0.26	4

**DNAPL Step-Out Groundwater Investigation, Spring 2008
Organic Acids - Data Qualification Summary - SDG IRE0948/TAC08051308**

No Sample Data Qualified in this SDG

**DNAPL Step-Out Groundwater Investigation, Spring 2008
Organic Acids - Laboratory Blank Data Qualification Summary - SDG
IRE0948/TAC08051308**

No Sample Data Qualified in this SDG

**DNAPL Step-Out Groundwater Investigation, Spring 2008
Organic Acids - Field Blank Data Qualification Summary - SDG
IRE0948/TAC08051308**

No Sample Data Qualified in this SDG

ATTACHMENT H

Specific Gravity Data Validation Report

Specific Gravity for Standard Method 2710-F

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodices were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration was reviewed as applicable.

b. Calibration Verification

Calibration verification frequency and analysis criteria were met.

III. Blanks

Method blanks analysis was not required by the method.

No field blanks were identified in this SDG.

IV. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were not required by the method.

V. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VI. Laboratory Control Samples

Laboratory control samples analyses were not required by the method.

VII. Sample Result Verification

All sample result verifications were acceptable for samples on which a Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

VIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

No field duplicates were identified in this SDG.

**DNAPL Step-Out Groundwater Investigation, Spring 2008
Specific Gravity - Data Qualification Summary - SDG IRE0948**

No Sample Data Qualified in this SDG

**DNAPL Step-Out Groundwater Investigation, Spring 2008
Specific Gravity - Laboratory Blank Data Qualification Summary - SDG IRE0948**

No Sample Data Qualified in this SDG

**DNAPL Step-Out Groundwater Investigation, Spring 2008
Specific Gravity - Field Blank Data Qualification Summary - SDG IRE0948**

No Sample Data Qualified in this SDG